DOCUMENT RESUME

ED 035 385 24 HE 001 350

TITLE	An Analytical Study of Selected Contemporary American Choral Compositions and the Implications for Teaching Methods of Reading Music. Final Report.
INSTITUTION	Brigham Young Univ., Provo, Utah.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO	BR-9-H-010
PUB DATE	Dec 69
GRANT	OEG-8-9-5400010-2106(058)
NOTE	168p.
EDRS PRICE	EDRS Price MF-$0.75 HC-$8.50
DESCRIPTORS	*Choral Music, Higher Education, *Learning Theories, Music, Music Reading, Music Techniques, Music Theory, *Performance Factors, Skill Development, Structural Analysis, *Teaching Techniques

ABSTRACT

The objectives of this study were to identify specific performance demands of choral literature written by contemporary American composers, to relate these demands to the skills and knowledge required to learn this music, and to formulate teaching procedures that lead to successful performance. The compositions used, William Schuman's "The Last Invocation", Dello Joio's "Jubilant Song", and Barber's "Reincarnations", require special perceptual skills and present many learning problems because of their pitch, harmonic and rhythmic features. Seventy members of an A Cappella Choir were randomly divided into control and experimental groups; both of them briefly examined the scores, recorded the three numbers, and had eight rehearsals with the same conductor. The control group was limited to the score and rote drill procedures; unknown to the singers, warm-up exercises and drills were derived from problems in the music to be learned. The experimental group received the same treatment, but were also exposed to theoretical derivations of the musical problems and cross-referencing to encourage transfer of learning to reoccurrences of the same patterns. Performances were recorded again and evaluated by three choral judges who unanimously decided that the experimental group's post-rehearsal tape was superior in accuracy of pitch, rhythm, and security of singing. It was concluded that planned learning activities based upon analytically-derived problem features of choral music are highly effective in developing the musical accuracy of choral singers. (WM)

BR-9-H-010
PA 24

ED035385

FINAL REPORT
Project No. 9-H-010
Grant No. OEG-8-9-540010-2106 (058)

AN ANALYTICAL STUDY OF SELECTED CONTEMPORARY AMERICAN CHORAL COMPOSITIONS AND THE IMPLICATIONS FOR TEACHING METHODS OF READING MUSIC

D. Evan Davis, Project Director
Richard W. Robison, Principal Investigator

Brigham Young University

Provo, Utah

December 1969

The research reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

HE 001 550

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

CONTENTS

Page

Summary 1

Introduction. 4

Methods
  Analysis of Representative Compositions with Derived Skill Requirements 29
    Barber, "Anthony O'Daly" 31
    Dello Joio, Jubilant Song 43
    Schuman, "The Last Invocation" 75

  Skill Requirements with Related Learning Activities 81
    Barber, "Anthony O'Daly" 82
    Dello Joio, Jubilant Song 99
    Schuman, "The Last Invocation" 115

  The Experimental Design 131

Results 133

Conclusions 136

Recommendations 139

References 145

Bibliography 147

Appendixes
  A. Questionnaire Materials, American Composers and Choral Compositions . . . . A-1 to A-9
  B. Results of Survey and Acknowledgment of Respondents . . . . B-1 to B-3
  C. Terminology Used in Musical Analysis . . . . C-1 to C-4
  D. Sample Transparency with Overlays D-1
     (Provided for original copy only)

TABLES

"Anthony O'Daly"

I. Form 38
II. Rhythmic Features and Related Skills 39

III. Melodic-Pitch Features and Related Skills. 40
IV. Harmonic Features and Related Skills. 41

Jubilant Song

V. Form. 70
VI. Rhythmic Features and Related Skills. 72
VII. Melodic-Pitch Features and Related Skills. 73
VIII. Harmonic Features and Related Skills. 74

"The Last Invocation"

IX. Form. 76
X. Rhythmic Features and Related Skills. 77
XI. Melodic-Pitch Features and Related Skills. 78
XII. Harmonic Features and Related Skills. 80

"Anthony O'Daly"

XIII. Rhythmic Skills and Related Learning Procedures. 83
XIV. Melodic-Pitch Features and Related Learning Procedures. 87
XV. Harmonic Skills and Related Learning Procedures. 92

Jubilant Song

XVI. Rhythmic Skills and Related Learning Procedures. 100
XVII. Melodic-Pitch Skills and Related Learning Procedures. .104
XVIII. Harmonic Skills and Related Learning Procedures. 109

"The Last Invocation"

XIX. Rhythmic Skills and Related Learning Procedures. 116
XX. Melodic-Pitch Skills and Related Learning Procedures. 120
XXI. Harmonic Skills and Related Learning Procedures. 126

PLATES

"Anthony O'Daly"

I. Rhythmic Patterns for Drill. 85
II. Rhythmic Patterns for Drill. 86
III. Melodic-Pitch Patterns for Drill. 90

IV. Melodic-Pitch Patterns for Drill 91
V. Harmonic Patterns for Drill. 95

Jubilant Song

VI. Rhythmic Patterns for Drill. 102
VII. Rhythmic Patterns for Drill. 103
VIII. Melodic-Pitch Patterns for Drill. 107
IX Harmonic Patterns for Drill. 111

"The Last Invocation"

X. Rhythmic Patterns for Drill. 119
XI. Melodic-Pitch Patterns for Drill. 125
XII. Harmonic Patterns for Drill. 128

SUMMARY

An Analytical Study of Selected Contemporary American Choral Compositions and the Implications for Teaching Methods of Reading Music was begun in the spring of 1968, being funded by the United States Office of Education in November 1968. The study was completed in October 1969.

A list of contemporary American choral composers and compositions was compiled from the U. S. Government Printing Office Catalog of Published Concert Music by American Composers, 1964, and Supplement, 1965. The list was refined to include only SATB music using compositional techniques differing significantly from those of the common practice period of the eighteenth and nineteenth centuries and representing idioms uniquely associated with the modern scene. The selections were to require no accompaniment or keyboard only. The resulting list was sent to choral conductors primarily at universities with enrollments over ten thousand to determine those compositions which presented significant learning problems to their singers according to the conductor's personal experience. The following eight composers and representative compositions were thus selected for use:

1.	Charles Ives	Three Harvest Home Chorales
2.	Samuel Barber	Reincarnations
3.	Norman Dello Joio	Jubilant Song
4.	Vincent Persichetti	"Gloria" (from Mass)
5.	Daniel Pinkham	Stabat Mater
6.	Lukas Foss	Psalms
7.	William Schuman	"The Last Invocation" (from Carols of Death)
8.	Aaron Copland	In the Beginning

Upon intensive analysis three of these were found to embody about ninety per cent of the problems of all eight pieces, and so were selected for the experimental design. These were the Schuman "The Last Invocation", the Dello Joio Jubilant Song, and the Barber Reincarnations. With the pitch, rhythm and harmony features which might require special perceptual skills identified through analysis of the three compositions, learning activities were proposed to provide appropriate experience and to build the

necessary concepts.

An experiment was designed to assess the effectiveness of the proposed learning activities by dividing the subjects, college A Cappella Choir students, into a control group and an experimental group of seventy students each.

Each group was given two minutes to examine the score and was then recorded singing the number, it having been first determined that none of the pieces was familiar to any of the subjects. This procedure was followed with each of the three numbers, the results being recorded to provide a pre-assessment. Each group then experienced eight rehearsals under the same conductor, the control group being limited to the hand-held score and rote drill procedures (i. e., "lining out" patterns on the piano or with the conductor's voice). Although warmup exercises and drills were derived from problems in the music to be learned, the control singers were not advised of this--a pure rote situation being maintained. The experimental group was given the treatment above plus deliberate attention to the theoretical derivations of the musical problems and constant cross-referencing to encourage transfer of learning to re-occurrences of the same patterns. The overhead projector was used extensively with overlays to highlight the specific features under consideration.

After the eight rehearsals the two groups were recorded in performance of the three numbers. The recordings were evaluated independently by three choral adjudicators who heard the pre-treatment recording of the three numbers by an unidentified choir, followed by the post-treatment recording by the same choir. Each choir and number was similarly adjudicated.

The judges were unanimous in adjudicating the post-treatment tape of the experimental group superior in the accuracy of pitch and rhythm and in the security with which they sang. This was the primary feature which the judges were asked to evaluate. They were also unanimous in selecting the experimental group as showing the greatest improvement between the pre-treatment and post-treatment tapes.

An interesting and unexpected verdict appeared in the free comments of two of the judges. Each independently observed that the control group demonstrated a greater feeling and spirit for the music being performed in the post-treatment taping even though they were "a little fuzzy" and "not sure of their pitches"! The control group (rote-taught) further showed better "ability to listen to one another, to vary pitch so as to arrive at a blend of harmony", especially in the Barber number "which is more tonal and employs more imitation from voice to voice. . ."

The investigators' conclusions are that the specific planned learning activities based upon analytically-derived problem features of the music are highly effective in building musical accuracy in the choral singers. These experiences must be inserted briskly into the rehearsal without interrupting seriously the aesthetic involvement in the music. Thus experienced, they do tend to carry over and accumulate into a transferable body of musical learning and growth. Warmup material derived from the music being studied, whether taught purely by rote or by deliberate study through ear, eye and bodily response movement, is valuable; the latter being more effective than the pure rote experience. The greatest disadvantages lie in the intense analytical preparation required of the conductor for rehearsals aimed at teaching musicianship, and in the skill which the conductor must develop to draw these analytical features from the musical experience itself, without completely breaking the singer's aesthetic involvement with the music.

There is an apparent hazard in the analytical-discovern approach to learning contemporary music, (perhaps related to the physiological fact that there are about forty neural receptors from the eye to the brain for every one going from the ear to brain). If continued attention is being called to visual notation symbols in the rehearsal, an overpowering competition for the brain's attention is created. The auditory stimuli may thus be sublimated in the subject's response to the competing neural appeals until such time as he is sufficiently experienced with both visual and auditory stimuli to integrate them into one musical meaning--a very advanced skill indeed in contemporary music.

It is hypothesized that if both the rote and the studied approaches to the rehearsal experience were carried on until the music were memorized, the subsequent distraction of competing visual symbols would allow the affective, aesthetic involvement of the experimental group to once more emerge with a spontaneity equal to the control group in performance. In such a desired situation the singerwould have both the accuracy and the security devolving from a studied, analytical-discovery approach, which would make faster learning possible through increase of general musical skill and understanding, and the spontaneity and affective expression which are sought for in musical performance.

INTRODUCTION

In recognition of the desirability of more extensive use of the contemporary music of our own national culture in the schools of our country, the Office of Education and other agencies have invested substantially and generously over the past decade to encourage the creation and performance of contemporary American music. The result has been more evident in encouraging the creation than the performance; more successful in stimulating the performance of contemporary instrumental music than in increasing the performance of contemporary choral literature.

A 1966 study of preference patterns in high school, college, and community choral programs in the United States showed that contemporary music has not achieved a significant place in the performance repertoire. This study also pointed out that twentieth century American composers of choral music were behind their foreign contemporaries in popularity.[1]

A primary reason for this lies in the peculiar and extensive demands which contemporary idioms place upon the musicianship of the singer, who, unlike the instrumentalist, has no mechanical aids to assist him in negotiating new and unfamiliar melodic lines, bizarre harmonic and polyphonic textures, and unusual tone qualities and forms.

According to one contemporary American composer, music education has been slow to adjust to new conventions found in today's more complex music.[2] Comparatively few choral groups in high school or college are performing the type of music being produced by America's outstanding composers. The reason for this condition is the inability of the majority of such choral groups in America to perform music which is foreign to the traditional harmonic and melodic idioms.[3]

---

[1] Stanley L. DeFries, "An Analysis of Preference Patterns in Choral Programs in the United States of America" (Unpublished Dissertation, Indiana University, 1966).

[2] Joseph Penna, "The New Versus Tradition in Music Education," Perspectives in Music Education, Source Book III (Washington, D. C.: Music Educator's National Conference, 1966), p. 269.

[3] Ibid., p. 269.

The lack of appreciation and enjoyment was related to a lack of understanding of contemporary music in a study by Hornyak. He revealed a limited comprehension by untrained subjects of dissonances and changing meters in twentieth century composition, even after a verbal explanation of these features.[4] Although Hornyak's study was applied primarily to listeners, it can be equally as applicable to singers in the light of an observation by Mursell that "music is more satisfying both to hear and to perform if its rhythmic organization, key relationships, phrase structure, and melodic and harmonic textures are primarily and clearly grasped,"[5] i.e., the aesthetic nature of music is also affected by this understanding.

The lack of effective instructional procedures in the reading of contemporary choral music is another contributing factor to this problem. A study by Hales made apparent the existence of problems in choral reading, especially in certain sections of the United States. From his reasearch it was revealed that outside pressures directed toward performance objectives were among the leading causes contributing to the lack of proper music reading methods. Also listed as vital problems were the lack of utilization of an existent variety and abundance of good literature and the failure to use effective teaching procedures recommended by leading music educators.[6]

This want of fluency by choral students and teachers in meeting the demands of contemporary music has resulted in a lack of interest in good literature and in a lack of motivation for today's aspiring composers to write choral music in a contemporary idiom. One of the primary reasons for the gap between music educators and contemporary composers is the limited preparation of music educators in understanding and developing skills and methods of reading and utilizing complex contemporary choral music. The major, minor, and chromatic scales are used as the basis for most vocal reading instruction, and naturally lead to performance of music containing the same tonal and traditional rhythmic features. If music educators expect to move their students more completely into the stream of our contemporary culture, it will be necessary to acquaint the students with the modern musical idioms used by outstanding, living American composers, and to teach them to read and to perform in these idioms.

---

[4] R. Robert Hornyak, back cover of American Education, Vol. 3 (September 1967).

[5] James L. Mursell, "Growth Processes in Music Education," Chapter VI in Basic Concepts in Music Education, edited by Nelson B. Henry (Chicago: University of Chicago Press, 1958, p. 150.

[6] Bernell Hales, "A Study of Music Reading Programs in High School Chorusses in the Rocky Mountain States" (Unpublished Dissertation, University of Oregon, 1961).

Purpose and Need

The objectives of the present study were to identify and isolate the specific musical demands on performers of representative contemporary choral literature by American composers, and to relate these unique demands to the skills and knowledge necessary to learn the music. A secondary goal in identification of these musical features was to formulate teaching procedures which would facilitate the development of skills and understandings leading to successful performance of this music.

Preliminary research revealed a number of studies made in devising choral reading methods, but not from the specific source of American contemporary choral music. Other studies have been made of an analytical nature which deal with contemporary choral music, but without relation to the improvement of those skills and understandings which are necessary to learn such music. One such study was made by Harris, the purpose of which was to determine the availability and educational content of selected contemporary SATB compositions. The outcomes indicated:

1. Availability of a great many published compositions for study and performance by high school music students.
2. Many musical styles and compositional techniques suitable for study and consideration by music educators and students.
3. Many compositions of varying ranges of difficulty from comparatively easy to extremely difficult.
4. Much available choral music suitable to the voice range and tessitura of teenagers.
5. Many compositions with melodic, rhythmic, harmonic and formal features for study and performance by student

musicians.[7]

Harris' study implies the existence of a great variety of literature to choose from, much of which could form the basis for studies similar to this present one.

> Study is necessary to determine a pedagogical approach to teach singers more intelligent and thoughtful methods to accomplish the many challenges of contemporary choral music. This study has shown that a great amount of suitable choral material is available. It has also pointed out much educational context in these compositions. A logical next step would be for the choral profession to research a number of procedures to aid in the study and performance of the music.[8]

A study by Manzo, which attempted to discover the compositional and interpretive techniques employed in selected contemporary American music, delineated for the college choral conductor the performance problems inherent in the music. Conclusions from this study indicate the following:

1. A movement to free the text from the rigid confines of the bar lines.
2. Parallel motion of interval relationships.
3. Less symmetrical rhythmic patterns, odd-number meters, and multi-rhythms.
4. Extreme variety of dynamic treatment.
5. The use of rhythmic and melodic motives, repeated patterns, contrast in texture, and vocal and piano ostinato patterns.[9]

Two compositions chosen for analysis in Manzo's study are also included in this present analysis; however, implications for teaching music reading skills have been added to this study with a further purpose of suggesting methods to help build these skills.

---

[7] Wesley Harris, "An Analytical Inventory of Selected Contemporary SATB Compositions for High School Choirs" (Unpublished Dissertation, University of Oregon, 1966), pp. 696-699.

[8] Ibid., p. 700

[9] Ralph Dan Manzo, "A Study of Selected Choral Works by American Contemporary Composers" (Unpublished Dissertation, Colorado State College, 1961).

The unique contribution of a similar study by Dailey lies in his analysis of three choral works each of several different composers and of the relation of these works to each composer's total output. Stylistic features of each composer's work are approached through intrinsic patterns of musical organization in rhythm, melody, tonality, harmony, form, voice leading, choral grouping, and accompaniment.[10] The present study, however, pursues an additional purpose of relating musical features to implications for the teacher in developing musical understandings in the classroom setting.

Pisciotta made a similar study with concentration on the textural considerations of choral compositions. All six composers used in his study are also used in the present project. A practical textural vocabulary was an outgrowth of his research. He concluded that texture has important formal implications and interacts with the accompaniment when used.[11] This source of information proved helpful in delineating the broader aspects related to form, which led to a more thorough understanding of the whole structural organization of the compositions.

One of the few available published books dealing with the problems of music reading, particularly in relation to contemporary music, is Modus Tonus by Edlund (teacher of aural training at the Royal Academy of Music in Stockholm), now in use as a textbook in atonal music reading in some areas of the world. Edlund has recognized the limitations of modern music reading methods based upon major and minor tonalities. In addition to composing atonal melodies for sight reading and ear training, he has also included over one hundred examples from modern literature in order to illustrate the problems in existent compositions. This book is especially designed to develop a proficiency in reading contemporary music. Although Edlund's book was a valuable source of practice materials to develop facility in reading contemporary music, it did not duplicate the purpose of the present study: the improvement of methods for teaching the reading of contemporary choral music.

---

[10] William A. Dailey, "Techniques of Composition Used in Contemporary Works for Chorus and Orchestra on Religious Texts" (Unpublished Dissertation, Catholic University of America, 1965).

[11] Louis V. Pisciotta, "Texture in the Choral Works of Selected Contemporary American Composers" (Unpublished Dissertation, Indiana University, 1967), p. 392.

Preliminary Research Procedures

This study was limited to typical choral compositions of the last thirty years which represent a variety of styles in the twentieth century musical practice. The compositions selected were those by American composers whose names were determined on the basis of the following criteria:

1. Composers who have been residents of the United States since they were twenty-six years of age (U.S. Information Agency Catalog[12] standard of defining residency).

2. Composers whose works are published and have been included in the programs of choral conductors participating in a questionnaire.

3. Composers whose compositional output in mixed choral music within the last twenty years had gained a significant place in the repertory of those institutions of higher learning which participated in the questionnaire.

4. Composers whose music presents problems typical of contemporary composition techniques. This was as a result of preliminary research by the questionnaire and by the contemporary compositional techniques. (See the detailed terminology outline for contemporary music analysis in Appendix C.)

5. Composers listed in the Index to Biographies of Contemporary Composers by Storm Bull.[13]

6. Composers who have received most of their training in the United States.

---

[12] Catalog of Published Concert Music by American Composers, edited by Mrs. George W. Logemann (Washington, D.C.: U.S. Government Printing Office, 1964, Supplement, 1965).

[13] Storm Bull, Index to Biographies of Contemporary Composers (New York: The Scarecrow Press, Inc., 1964).

Music was chosen for the analysis on the basis of the following criteria:

1. Music lists obtained from the U.S. Information Agency Catalog, 1964 to present editions, of concert music by American composers (published annually).[14]

2. SATB music defined by primary reference sources in the bibliography as typifying the problems unique to contemporary compositional techniques, which are differentiated from characteristics of the common music practices of the eighteenth and nineteenth centuries (major and minor tonalities, tertial harmonies with root progressions leading to primary and secondary key relationships, regular pulse accent patterns felt in two's or three's with accents normally occurring at the beginning of measures, and comparatively little stress placed on rhythmic counterpoint).

3. Music automatically selected from a vast field of contemporary choral music by choice of composers. (Refer back to criteria for selection of composers.)

4. Music which can be performed without accompaniment or with keyboard accompaniment.

5. Music which was selected according to choices made by the conductors who participated in the questionnaire as being most representative of the composers which they had selected.

In addition to the music chosen for this particular analytical study, it must be emphasized that there exist a great many choral compositions of high caliber which are not representative of the unique compositional techniques being emphasized in this study. Many of these compositions are available, not only through the numerous publishing companies throughout the world, but also through other agencies whose purpose is to encourage the development of many aspiring young composers. The Contemporary Music Project is among the most notable of these agencies and is supported primarily by the Ford Foundation and Music Educator's National Conference (MENC). During the last ten years, many noteworthy compositions have been produced and are available in Xerox copies through University Microfilms.

---

[14] Catalog Published Music

Questionnaires were sent to choral conductors at major universities with enrollments of over ten thousand, and randomly to schools and conservatories of music. The conductors to whom the questionnaire was sent represented a geographical cross section of the United States, and in most cases were unknown to the investigator. This questionnaire was formulated as a tool to select the composers and compositions, as previously stated, and to ascertain the nature, difficulty, and frequency of problems encountered in mixed choral music by contemporary American composers. These problems were stated in the form of melody, rhythm, phrasing, tonality, and serial technique. (For a detailed description of the questionnaire and results, see Appendix B.)

The following eight composers and representative compositions were selected for final analysis:

1.	Charles Ives	Three Harvest Home Chorales
2.	Samuel Barber	Reincarnations
3.	Norman Dello Joio	Jubilant Song
4.	Vincent Persichetti	"Gloria" (from Mass)
5.	Daniel Pinkham	Stabat Mater
6.	Lukas Foss	Psalms
7.	William Schuman	"The Last Invocation" (from Carols of Death)
8.	Aaron Copland	In the Beginning

Standard terminology derived from reference sources in the bibliography were used to identify and define specific elements found in the final analysis of the composition (see Appendix C). Although some terminology used is common to many style practices of various periods such as melody, rhythm, harmony, form, texture, cadence, and tonality, each is discussed in relation to the unique way in which it is applied to contemporary music. Terminologies peculiar to features of twentieth century composition, such as expanded and obscure tonality, modal materials, whole-tone and synthetic scales, serial technique, and other characteristics of modern musical composition, were delineated through the analysis, then summarized and related to understandings and skills needed to learn the music. Summary tables were used to present the findings of the analysis.

The identification and description of these features were then used as a basis for clarifying and defining the skills and understandings necessary to perform the music under consideration accurately. For example, when the vertical relation of major or minor seconds occurred as a significant factor (referring more to homophonic texture) in understanding and accurately performing the music, the skill was then identified as the individual's ability to sing one note with accurate intonation (using the piano or other instruments as a referent guide) while the next higher voice sings the vertically related second, continuing with additional voices until the singers hear the sonority produced by major seconds and feel the confidence which comes through successful execution of this type of music. The main purpose, therefore, in defining the skills relating to reading and listening, was to formulate methods to develop these skills.

Based upon a summary of the analysis, materials to aid the learning process were formulated and methodology was recommended for their practical use in teaching choral music. A sequence of developmental learning experiences for the identified skills was presented according to the complexity of the problem at hand, e.g., modal scales forming the melodic basis for a composition compared to major scales, in order that students may discover the difference in major and modal materials. The suggested methods are aimed at helping to discover these concepts. Sequential orders of presentation in the form of preliminary vocalizes, and listening and rhythmic experiences based upon the music to be learned, were suggested to lead to a more thorough understanding of the music. Patterns of learning sequence generally revolved from complex to familiar and gradually back to complex (synthesis-analysis-synthesis) by comparing traditional music idioms with those in this project.

The teaching implications and methodology suggested in the study were formulated upon principles of learning identified by

Asahel D. Woodruff, James Mursell, Will Earhart, and Robert F. Mager, and others.

BACKGROUND AND RELATED STUDIES IN MUSIC READING

Music reading is approached by present-day music educators from two different points of view: automatic kinesthetic motor response with understanding of visual symbols, and automatic kinesthetic motor response without understanding of visual symbols--much as a parrot learns to "speak". Mursell relates this symbolic understanding to the acquisition of music comcepts (melody, rhythm, harmony, form, tonality) and states that "symbols stand for concepts which have musical meanings, the progressive grouping of which is quite essential for any considerable degree of musicality."[1] The second connotation is explained by Mursell as being associated with manipulative skills similar to those used by gymnasts.[2] In singing, these manipulative skills might be compared to vocalization for muscular development and coordination, or singing in a rote style without regard to musical understanding.

"The acquisition of manipulative technique is a formidable and ever-present problem in music education . . . divorced from the actual making of music [it] is a breach of continuity"[3] referring to the continuity associated with musical growth). According to Mursell's philosophy, technique, --"the ability to traslate musical conceptions adequately and satisfactorily into sound,"--is related to musical understanding, and the development of technique and of music reading go hand in hand.[4] He further indicates that musical growth is frustrated in divorcing these two skills.[5] The more highly skilled a person is in music reading, i. e., taking tonal meaning from the printed page, the greater depth of musical understanding he possesses.

Sight reading is often considered in a different light from other types of music reading. While reading spontaneously at sight requires specific intensive drill to sharpen reflexes, the basic tools are still those of understanding melody, rhythm, harmony, form, texture, and style. One of the purposes of this study was to relate these areas to the singer and bring him to a closed understanding of them through the process of musical analysis.

---

[1] Mursell, Basic Concepts, p. 150.

[2] Ibid., p. 147.

[3] Ibid., p. 148.

[4] Ibid., p. 148.

[5] Ibid., p. 148

A variety of music reading methods have been prescribed to help students develop music reading skills. According to Leonard and House the following procedures should be followed:

1. Guiding students to discover patterns of similarity and difference in melody, rhythm, form, and harmony as they listen to and perform the music. If the teacher persists in calling the students' attention to these patterns, the students will eventually begin to look for themselves.

2. Watching the score while a recording is played helps students look and listen for primary and secondary areas of tonal significance, particularly at cadence points and the beginning and end of the song. The teacher calls these cadence points to their attention, then calls for response from students when they recognize their occurrence.

3. Listening to and watching for harmonic patterns of spacing and chord quality. Are chords constructed in triads, fourths, open fifths, seconds, added notes, sevenths, ninths, or eleventh chord patterns?

4. Watching for and listening to the contour of the separate parts in relation to others. Does the individual part progress disjunctly or conjunctly; scale or chordwise; minor or major, whole tone, or modal--if scalewise?

5. Setting up a basic tonality for every song to be sung. Singing the I, IV, V7, I progression to establish this tonality.

6. Vocal chording of basic chord patterns found in song or songs to be learned.

7. Learning specifics of notation only after a broad exposure to the music--synthesis-analysis-synthesis.[6]

---

[6] Charles Leonard and Robert House, Foundations and Principles of Music Education (New York: McGraw-Hill Book Co., 1959), pp. 240-243.

Most authorities agree that a rehearsal must move quickly and keep all singers continually involved for the most effective results. There is another common feeling among authorities that music reading skills will improve with practice. If a person begins music reading experiences in elementary school and continues with music compatible with his ability, there will be a noticeable improvement in his performance over the span of a few years.

Jones suggests a detailed breakdown of procedures in each of the three areas constituting the cycle of learning--synthesis -analysis-synthesis:

1. Synthesis--sing through the composition without stopping, not being afraid of making mistakes. Try not to make the same mistake twice.

2. Analysis--begin the song, isolate and solve the first problem, place the drilled spot back in context and try from the beginning until the second problem is encountered, and so on until the song is thoroughly mastered. Student self-analysis is also stressed. After this initial phase is complete, make a final check with each section.

3. Synthesis--singers feel a sence of accomplishment. Stress the interpretation.[7]

In addition to other sources already cited, Jones states the importance of meeting and solving reading difficulties only when they are encountered.[8] This is in agreement with Leonard and House that "efficient learning begins with a compelling and intelligible problem."[9]

Most experimental research related to music reading has been performed with isolated intervals and rhythms. One device used in these experiments is the tachistoscope (a slide projector with a flash meter attached for flashing images on the screen for as long as several seconds or as short as 1/100th of a second). Hammer developed an achievement test for measuring sight singing ability and also for measuring the effectiveness of various techniques for developing sight singing skills. According to his study, tachistoscope techniques are significantly effective for these purposes.[10]

---

[7] Archie Jones, Techniques in Choral Conducting (Boston: Carl Fischer, Inc., 1948), p. 84.

[8] *Ibid.*, p. 82.

[9] Leonard and House, Foundations and Principles, p. 132.

Baker conducted a similar study involving the tachistoscope as an aid to teaching harmonic reading to second semester college students. Results of this study were inconclusive.[11]

Christ conducted a study to determine the effect of training with the tachistoscope and metronome on ability to perceive and reproduce rhythmic patterns. Some conclusions drawn from his study are as follows:

1. All subjects, regardless of initial ability, made significant gains in rhythmic reading when exposed to this training.

2. Use of the tachistoscope and metronome is a quick and effective means of training rhythmic reading.

3. Music reading training should be made an integral part of training musicians.[12]

Bargar devised two tests, one involving the tachistoscope and another called the Notation Copy Test. He concluded that visual recognition skills are as important to music students as other music skills.[13]

Barnes investigated the effect of group drill in sight singing certain intervals in a given order, using the tachistoscope to help the individual sing those intervals. He concluded that the experimental group using the tachistoscope made significantly higher achievement in sight singing both conventional and unconventional melodies.[14]

---

[10] Harry Hammer, "An Experimental Study of the Use of the Tachistoscope in the Teaching of Melodic Sight Singing" (Unpublished Dissertation, University of Colorado, 1961).

[11] Charles E. Baker, "A Comparison of Two Methods of Teaching the Reading of Harmony" (Unpublished Dissertation, Indiana University, 1964).

[12] William B. Christ, "The Reading of Rhythm Notation Approached Experimentally According to Techniques and Principles of Word Reading" (Unpublished Dissertation, Indiana University, 1954).

[13] Robert Bargar, "A Study of Musical Reading" (Unpublished Dissertation, Ohio State University, 1964).

These studies indicate that the tachistoscope is a valuable tool in teaching music reading of abstract patterns. Other studies have been made in relation to music reading skills. Jeffries concluded that:

1. Intervals drilled in a random order of difficulty led to fewer errors in judgment than intervals drilled in order of increasing difficulty.

2. Delayed knowledge of results was superior as a teaching aid to immediate knowledge of results, except when the more difficult intervals were drilled in large numbers.

3. Minor sixth and minor seventh were among the four most frequently missed intervals.[15]

Many materials exist in textbooks used for skill, theory, and sight singing classes not in the context of the present study.

What are considered to be some specific skills required in reading music, and what are some suggested methods in developing these skills? Authorities generally concur that tonal memory is a necessary attribute to a good reader of choral music. This is not to infer, particularly, the ability to mentally retain isolated notes, but to retain related patterns of notes or tonal referent points. These referent points are interval relationships in both linear (melodic) and vertical (harmonic) patterns. Earhart emphasizes the importance of tonal memory in relation to other referent points. "Probably more important than any of the preceding aids which all belong to an absolute pitch category (in that they seek tones apart from any system of relationship) is the aid given by conceiving chord and interval relationships."[16] Based upon this assumption, one would expect the singer to be able to distinguish and perform accurately all tertial chords, quartal chords, added note chords, clusters, diminished and augmented chords, and forms of minor, chromatic, pentatonic whole tone, synthetic, and modal scales, in that they are all conceived in patterns of chordal and interval relationships and in that they provide the raw materials for most existent music.

---

[14] James W. Barnes, "An Experimental Study of Interval Drill as it Affects Sight Singing Skill" (Unpublished Dissertation, Indiana University, 1960).

[15] Thomas B. Jeffries, "The Effects of Order of Presentation and Knowledge of Results on the Aural Recognition of Melodic Intervals" (Unpublished Dissertation, University of California, 1965).

[16] Will Earhart, Choral Technics (New York: M. Witmark & Sons, 1937), p. 87.

Experimental study has also revealed that tonal memory and sensitivity to simultaneous intervallic relationships can be improved through practice. McQuerrey investigated the possibility of increasing the sensitivity of music students to interval intonation through a training scheme using an electronic apparatus (Intonation Training Device consisting of an octave segment of an electric organ) wherein students could adjust pitches by dial manipulation. One of his conclusions stated that a course of training which would instruct and demonstrate comparative tuning, and give aural experience with minute intonation deviations that could be measured visually, would increase the sensitivity of students to interval intonation.[17] This method, if combined with musical understanding, might also be a valuable aid to teaching music reading in light of Mursell's view that "the development of music reading depends altogether on the establishment of working connections between ear, eye, and understanding."[18]

A variety of approaches is feasible and desirable in developing music reading skills. The approach to music through the separative elements of rhythm, melody, and harmony is in itself an application of a variety of methods. The teacher is an engineer of numerous experiences through which every student can, at his own growth rate, perceive and apply all basic concepts involved in musical understanding. Earhart advocates this philosophy.

> Apart from our sol-fa or key basis, systems of sight singing have been founded on either the absolute-pitch or on the interval basis. But regardless of what the adherents of one system or another may claim, the truth appears to be that no one system supplies all the requisite aid, and that all of their methods together will give none too much power to the singer.[19]

---

[17] Laurence H. McQuerrey, "The Improvement of Sensitivity to Interval Intonation through Training with a Mechanical Apparatus" (Unpublished Dissertation, Indiana University, 1957).

[18] James L. Mursell, Music Education, Principles, and Programs (Morristown: Silver Burdett Co., 1956), p. 141.

[19] Earhart, Choral Technics, p. 87.

James Mursell gives reinforcement to this philosophy by suggesting definite methods, many of which were applied in this study:

1. "To see what one hears"--by listening to a performance and following the score; by listening for principle themes and variations; by singing with a recording or good performing group without looking at the score and then look- at the score; by playing parts on instruments; by indicating the contour of melodic phrasing, or repetitions, and alterations in rhythms, melody, and harmony; by indicating bodily responses to what is seen and felt rhythmically in the music.

2. "Noticing musical highlights"--particular types of scales, chords, rhythms, or progressions which seem to give a feature of prominence to the music.

3. "Cooperative discovery"--democratic approach through the right kind of help from the teacher and where it is needed the most: through a recording, piano, or other type of model performance; through examination of notation before beginning; through establishing a tonality at the beginning; through a beginning tempo best suited for the students; and through playing parts on instruments, if available.

4. "Independent discovery"--resulting from numerous experiences in cooperative and democratic discovery, with the right kind of help. Anything that can be done to help students make musical discoveries will be well done.

5. "Intelligent study of the notation"--guiding students to see meaningful groupings in the form of melody, rhythm, tonality, form, and harmony.

6. "Extensive reading"--it is the business of music education to develop musicianship and musical understandings through extensive experiences in a variety of music out of which skilled and rapid reading can quickly emerge.

7. Specifics (concepts involving notation of musical elements) should be taught when musically appropriate; should be presented in a continuous order of developmental sequence--from simple to complex; should result from association with the music; should be emphasized when and as needed; should be presented with a continuous aim toward deeper musical understanding.[20]

---

[20] Mursell, Music Education: Principles, and Programs, pp. 172-196.

Musical understandings and skills stem from experience with music itself. A correlation of two main philosophies will clarify this statement: efficient and intelligent learning begins with a compelling problem in the form of actual music literature to be learned. Experience with great literature is the means by which musical understanding, skills, and attitudes are developed. It is contrary to accepted principles of learning to attempt to develop musical understandings pertaining to harmony, intervals, scales, texture, form, etc., as abstract elements which are divorced from the music.[21] Through the study of great literature, the various elements are drawn together as a gestalt pattern (whole-part-whole), thus offering the motivation, the compelling problem, from which it is possible to discover and relate all the various musical elements into meaningful experiences resulting in learning and musical growth. Helbling recommended as a result of his study a combination of whole-part approach to learning musical patterns. The whole would be concerned primarily with broad perspectives of the music: mood, form, texture. The parts are then broken down into rhythm, tonality, melody, harmony, tempo, and dynamics.[22]

A summary of the previously cited sources reveals three varying positions in teaching music reading:

1. The whole-part-whole approach in which the singer cooperatively and independently discovers various tonal and rhythmic elements in relation to the whole.

2. The continuous synthesis approach which emphasizes corrective-rote activity without analysis of musical structure.

3. The experimental approach which deals with abstract intervals and rhythms out of context with musical literature.

The synthesis-analysis-synthesis (whole-part-whole) approach was used as a general guide for formulating the suggested music reading procedures presented in Chapter Five.

---

[21] Ibid., p. 95.

[22] Ray Helbling, "An Experimental Study of the Relative Effectiveness of 'Whole' and 'Part' Methods of Teaching Sight Singing" (Unpublished Dissertation, Indiana University, 1965).

DESCRIPTION OF ANALYSIS AND RELATED PROCEDURES

The results of the questionnaire and other data-gathering tools mentioned led to the final selection of the music used for the analysis (refer to Appendix A for questionnaire). From compositions selected for the study, the questionnaire participants indicated the most significant musical features relating to problems for singers to be: tonality, harmony, rhythm, melody, phrasing, and texture. Tone row or serial composition was only slightly considered significant by the respondents, although five compositions were considered by some respondents as reflecting serial technique. In treating the analysis, therefore, an attempt was made to identify skills which are more particularly suited to significant features in each composition.

In every case the composition is an extended work, or one of several works combined in a cyclic form. Liberty was taken to choose one section or number which contained a sample of features from the entire work and to analyze it in detail, rather than the complete work. Persichetti's "Gloria," for example, is from his Mass which contains a number of selections, each worthy of examination. The same is true with "Anthony O'Daly" from Reincarnations, a set of three related songs. The Stabat Mater by Pinkham is in a cyclic form containing ten sections tied together by a tone row in its various forms and also by the religious text. The seventh, ninth, and tenth sections of the Stabat Mater were chosen to represent a sampling of this composition. "Lord of the Harvest" is the second of a set of Three Harvest Home Chorales by Charles Ives. "The Last Invocation" was selected from Carols of Death to represent a stylistic aspect of Schuman's music. Part Two from Foss' Psalms is the most extended and representative section of three parts comprising the complete work. The first half of Copland's In the Beginning was chosen for a more thotough analysis, because it gives an overall view of many characteristics which help tie the entire composition together.

There were two primary reasons for organizing the study in such a manner: to identify specific structural features in each composer's style representative of contemporary compositional technique and to develop specific reading skills which can be related to most contemporary choral music.

Several composers personally contributed to the study in relation to their own compositions. Their statements were used when available to further clarify the analysis.

Because of the broad scope of this study, based upon eight representative compositions and all stylistic possibilities inherent in them, features, skills, and suggested methodology were limited primarily to rhythm, melody, and harmony. Form and texture are composite areas which include melody, harmony, rhythm and tonality. These two areas involve understanding and perception of all elements comprising sub-structures. Tonality also is a more composite element comprising both melody and harmony. Tonality was, therefore, approached through both tonal areas of melody and harmony and was not considered separately. Subsequent tables showing the form of each composition include the more encompassing areas of texture and tonality. Form and texture also are frequently referred to in the analyses, but are not discussed in detail except when related appropriately to rhythm, melody and harmony.

After the analysis was made, the musical requirements of rhythm, melody and harmony were translated into specific skills. It was suggested in accordance with the whole-part-whole approach that the teacher should periodically call the students' attention to broader structural elements while developing their reading skill relating to the more intrinsic features. Skills identified in the analysis were stated in the form of final behavioral objectives by which singers, through the act of singing, could obviously demonstrate their understanding of the music at hand. These skills were related directly to the intrinsic musical elements of each composition being analyzed. The resulting skill is for the student to perceive the element aurally, to transfer this perception into a concept associated with a visual stimuli, and to demonstrate the concept through a kinesthetic-motor process involving a physical response such as singing, moving, or playing instruments.

It was discovered that most music in this analysis could be conceived melodically in a tonal framework. The two selections which indicated the greatest exception were those by Pinkham and

Ives. The inter-relations which occur among the voice parts indicated a juxtaposition of "atonal" factors produced primarily by independent themes being stated in tonal areas other than the tonic--often the dominant. Although tonal centers are sometimes implied in each voice part to help the singers relate their parts to melodic referent tones, these implications do not necessarily refer to main key centers, which in many cases are ambiguous because of continually changing root progressions. For example measure 10 of Schuman's composition implied to the present writer tonal centers of A♭ in the soprano, G in the alto, and C in the bass, but only to help the singers better orient themselves in finding referent tones. Measure 11 also suggested tonal ambiguity and implied both F# and B as tonal centers for the altos and sopranos. Although the necessity of going beyond melodic and harmonic idioms used in the common practice period was mentioned, it was still considered necessary to relate and compare dissonance to consonance and atonal patterns to tonal patterns in order that the learner could have a familiar basis for relating the new. An accepted principle of learning is to take the student from where he is and to relate new patterns of knowledge to those which are already familiar to him. The methods later suggested in this study were devised with this principle in mind.

Certain interval constructions, both melodic and harmonic, have terminologies common to all periods of music. Perfect, major, minor, diminished, and augmented intervals are terms common to both melodic and harmonic construction. The point of departure, however, between traditional and new seemed to be manifest by the unique progressions of intervals and the order in which they occurred.

Melodic scale progressions were usually identified in the musical score where feasible by solfegge letters (d, r, m, f, s, l, t, d) or corresponding numbers placed between the note and text in each part. Deviation from scale tones were shown in the traditional way, i.e., ti♭ = te. Harmonic identification of unique features was always shown by numbers corresponding to chord structure. These numbers are usually shown adjacent to and slightly above the corresponding pitches. Tertian chord structures with added tones are usually identified by numbers 1, 3, 5, etc., from the root. Added tones (2, 4, 6, 7, 9) are often circled. Quartal structures are given numbers according to the order in which the fourths are constructed (1, 2, 3 or 1, 2, 3, 4, 5) depending upon the number of consecutive fourths being used. Lines used as brackets include arrows pointing vertically for harmonic and horizontally for melodic features.

The three detailed areas pertaining to this analysis were related primarily to musical structure. Coherence of rhythmic and tonal utterance of music set to words in most contexts depends upon the ultimate skills of singing in pitch, with tone color, inflections, and rhythms which conform to the words and moods suggested by the music. This study could provide a point of departure for further research in relating all of the elements pertaining to the expressive content to the words. Although relation of music to text is of considerable importance, it was outside the delimitations of the present investigation. Periodic reference was made to vital elements of diction, tone color, tempo, and dynamic effects and inferred as part of the methodology. Technical control, although essential to the successful rendition of music, was not an objective of this study. Melodic features of range and tessitura closely associated with technical vocal skills were also considered outside the scope of this analysis, as these are not peculiar to contemporary choral literature. It was assumed, however, that students would receive training in the fundamental singing skills of diction, breath support, vocal agility, dynamics, color control, and range, concurrently with the musical skills emphasized in this study.

Determination of Skills and Teaching Methodology

An ultimate behavioral objective commonly expected by most choral teachers is to have their students sing great musical literature of representative styles and periods with accurate pitch, rhythm, and expressive quality suggested by the mood of the music. The point of departure, however, occurs in exactly what is entailed in the mastery of structural details in order to achieve this ultimate objective. In formulating methods and procedures for teaching music, one must ask if the methods are going to contribute to the musically educated person. With this question comes a deeper inquiry into the factors that contribute to being musically educated. Is the goal of choral teaching to educate its members in understanding musical organization, styles, form, etc., or is it merely to prepare the members for public performances of a piece of music, and to have the parts played until the singers absorb the pitches and rhythms without understanding the organizational processes which they are attempting to interpret?

The present writer's view as to the philosophy of music education exerted an influence in his choice of procedures, and needs explanation at this point. According to the recommendations of leading music educators, methods should be used in the rehearsal which will lead toward musical understanding while developing musical skills resulting in musical growth. Further justification of this approach is found in statements of Bargar.

> "Little is understood about the skills required in musical activities. Furthermore, the specific tasks through which these skills operate have scarcely been defined by musicians except in terms so vague as to make experimentation difficult. Without some substantial increase in our understanding of the specific behavioral tasks in which musicians engage, and of the skills required of musicians to perform these tasks, it will be impossible to improve the largely tradition-bound pedagogical practices which now exist in the field of music.[1]

> "It is questionable to assume that musical tasks which appear to be the same, and which may even involve identical musical materials and types of responses, are related. It is equally questionable to assume that training in one such task will automatically produce beneficial effects on students' performance in another task.[2]

The methodology advocated in this study was based on principles of musical learning whereby the skill of reading results from active response to the music itself in a whole-part-whole approach. Leading music educators advocate the importance of deriving concepts from the music itself, which was a primary purpose of this study. The music to be learned provides a clue as to the raw materials from which to develop exercises--warm-up and problem-solving, e.g., the Phrygian influence in Persichetti's "Gloria". The suggested procedures contained herein are a few of many devices and methods which should allow each student to reach a high level of competency in music reading. To approach a choral rehearsal with emphasis on only one of the following elements is insufficient: blend, balance, intonation, expressiveness, diction, tone quality, melody, harmony, texture, form, rhythm, or dynamics. A variety of methods, based upon a composite of all elements found in the music to be learned, is sought. This variety of methods does not result merely from changing clapping hands to tapping feet, from alternating tachistoscope to flash cards or chalkboard or ditto sheets (although these are most helpful), but result from imaginative and intensive pursuit of requirements suggested by the music itself.

---

[1] Robert Bargar, "A Study of Music Reading" (Unpublished Dissertation, Indiana University, 1964), p. 110.

[2] *Ibid.*, p. 113.

A skill which was related to an isolated feature was initially defined in terms of a behavioral objective. Methods used to achieve each behavioral objective were also isolated in accordance with the isolated feature and skill to be developed. This involved sub-structural features, skills, and methods in some cases. For example, a harmonic feature involving added-note chords would involve demonstrations of teacher and students first singing the chord in context with the complete sonority, and directing students to listen for the added note, then listening to the sonority without the added note. As students were led to discover the part containing the root, third, and fifth of a chord, they would eventually attune their perception to the part containing the added sixth. Voices singing the basic triad sonority would give way to the emphasis placed upon the added note, and the part singing the added note would give greater stress (depending upon the context) which in combination would produce the appropriate effect resulting from the added note sonority.

In formulating methods it was assumed that the singers would not respond identically in the perception of aural stimuli or to visual stimuli translated into aural experiences. Therefore, a wide variety of approaches was suggested in order to reach each person according to his perceptual response pattern. It was also assumed that singers with perfect pitch would respond simultaneously to certain intervals, while others would utilize related instrumental training or other reading experiences to help them find the interval. It was suggested, therefore, that quicker respondents share their personal methods in finding the new interval. This provides for the earlier cited democratic atmosphere in the classroom with everyone sharing ideas for the solution of problems. Every student would be allowed to respond positively in his own time to the solving of a particular problem of intervals, rhythm, phrasing, etc.

The suggested methods could be utilized as special needs arise. Although a rhythmic problem involves a period of concentrated effort, the teacher should be aware of student attention span involving one continuous type of activity. It may be necessary to leave temporarily the pressing rhythmic problem and concentrate on another musical activity involving melody or harmony, or possibly leave that particular composition and return to it at a later time. A variety of activities is not only to be used within one musical compostion, but within a number of compostions representative of different historical and stylistic periods.

Although some methods and procedures are suggested to build the skills identified through the analysis, it must be remembered that a variety of approaches is possible and necessary. The teacher should be able to devise, both spontaneously and deliberately, a large reserve of methods to teach any one concept. The important thing is that students grow musically because of the types of experiences they are having.

The ability to analyze visually what he has done is vital in helping the student form concepts that will transfer into higher cognitive levels of learning. If the singer visually recognizes within the pattern of a melody unique intervals of tritones, minor sevenths, augmented fifths and diminished fourths, and develops the aural awareness and kinesthetic-motor facilities to perform accurately such intervals, he will likely be able to carry this ability over into other music when those patterns occur.

While it is suggested that much could be gained by the average singer in developing the more elementary sight singing skills through the suggested procedures contained in this study, it was assumed for the present investigation that most students would already have the basic knowledge and skills related to sight singing music of the difficulty of hymns in the common practice style. Rehearsal procedures, therefore, are designed for students who can:

1. Sing any given interval within the context of a major scale.

2. Perform rhythmic patterns based on regular occurrences of two, three, or four pulses involving quarter, eighth, or half notes.

3. Sight read a cappella melodies, rhythms, and harmonies of the hymn style of the common practice periods.

ANALYSIS OF MATERIALS AND IDENTIFICATION OF SKILLS

This section is divided into three main sections, one for each composition and its related tables. The music for Barber's

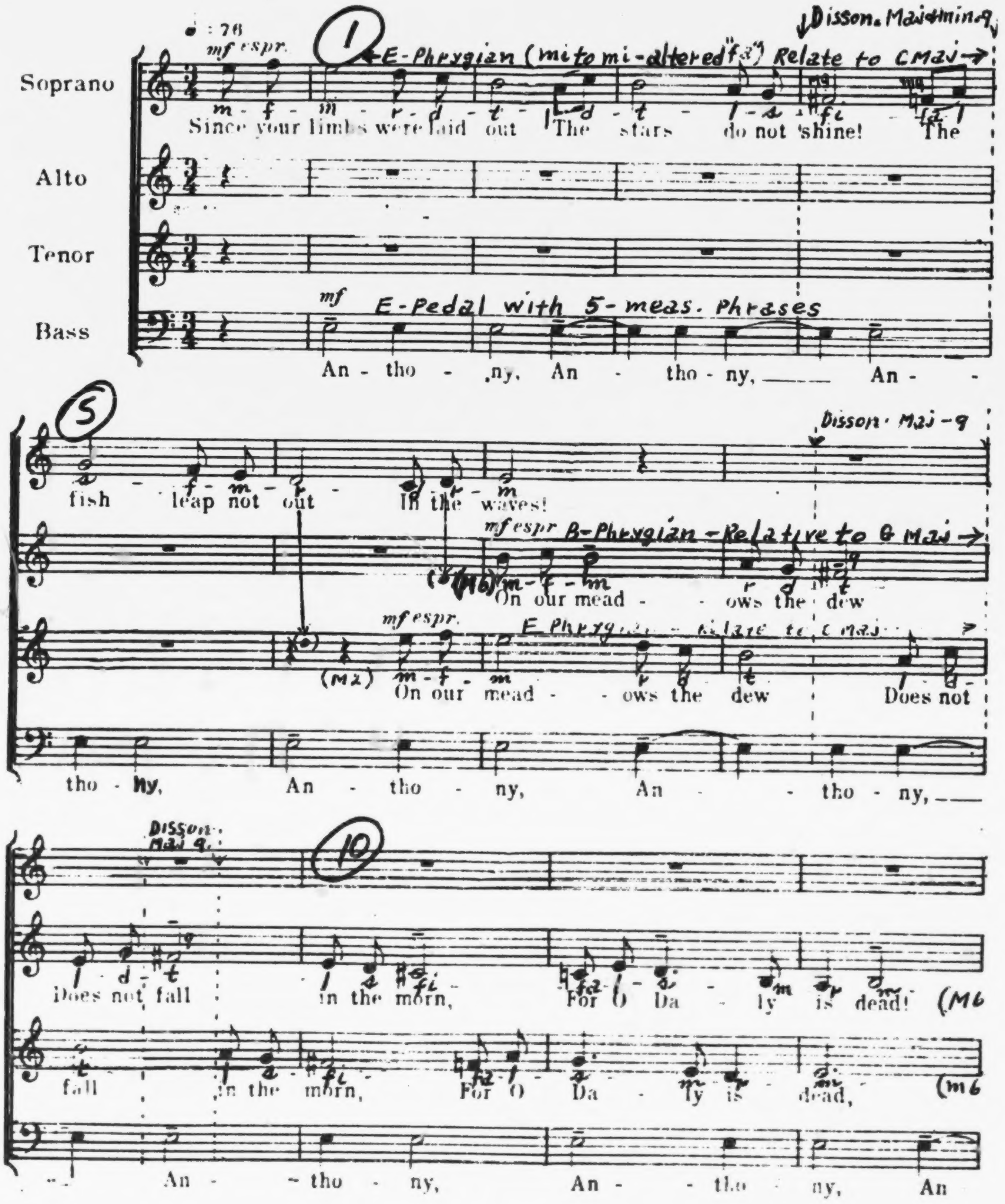
"Anthony O' Daly" from Reincarnations and Dello Joio's A Jubilant Song is reproduced with markings to point out features peculiar to twentieth century compositions and presenting problems to singers. (Permission was not granted by the copyright holder to reproduce William Schuman's "The Last Invocation" so for that composition the analysis chart only can be given.) These markings can be used as a basis for making transparencies to show with an overhead projector while teaching the music (see Appendix D). It is recommended that these markings be utilized as necessary to meet individual reading problems of students, especially in sections presenting a high degree of difficulty. Each composition is followed by a table showing the general form of the music. Additional tables of rhythm, melody, and harmony come next with each showing the relation of musical features to particular skills. These tables were formulated for two main purposes: to isolate and identify rhythmic, melodic, and harmonic features as represented by the markings in the music; and to relate these features (especially those posing the most obvious difficulty to singers) to concepts and skills needed by singers to perform the music accurately.

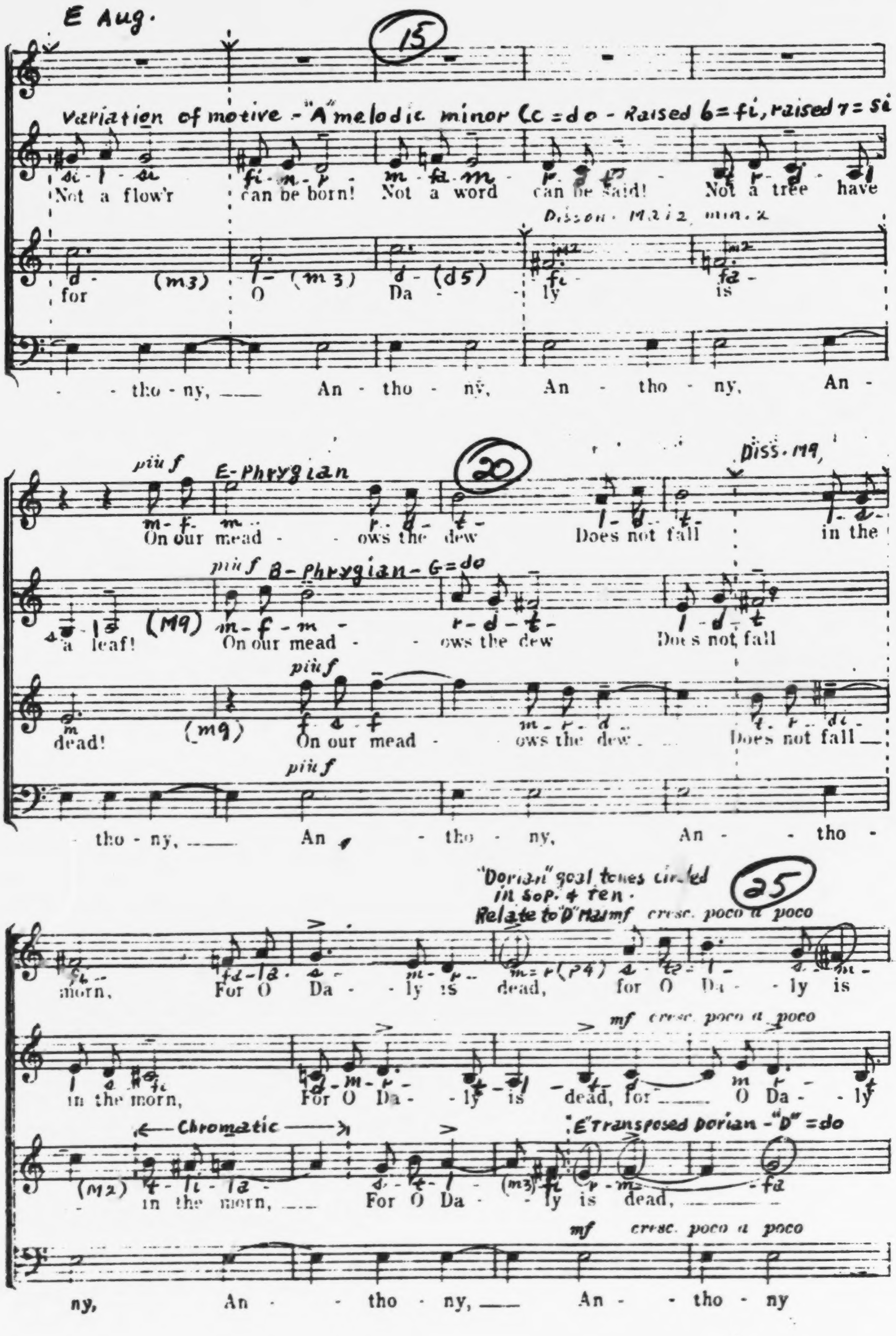
"Anthony O'Daly"

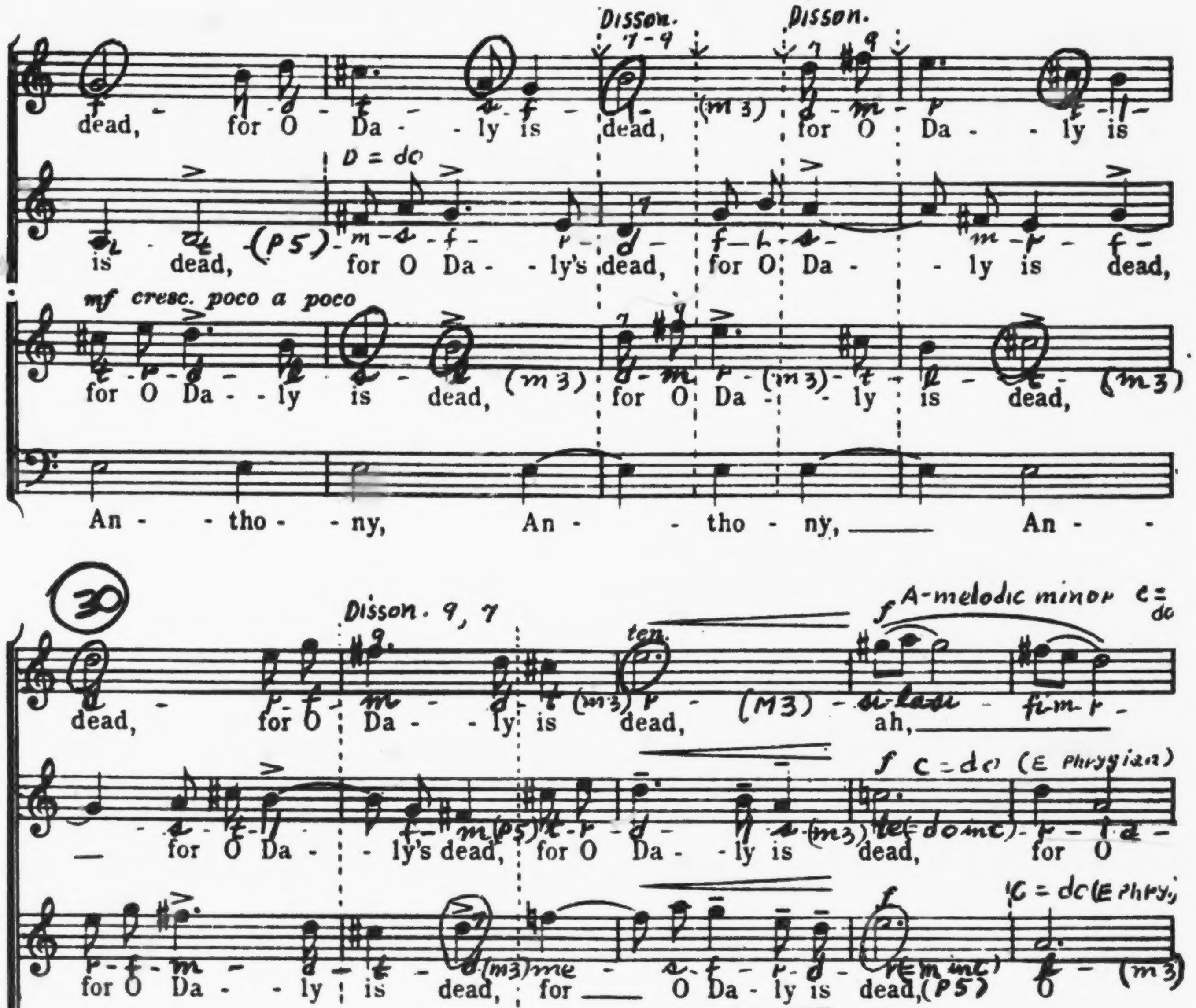
Based on a poem by James Stephens

Reprinted from Reincarnations by Samuel Barber, by permission of G. Schirmer, Inc. Copyrighted 1942.

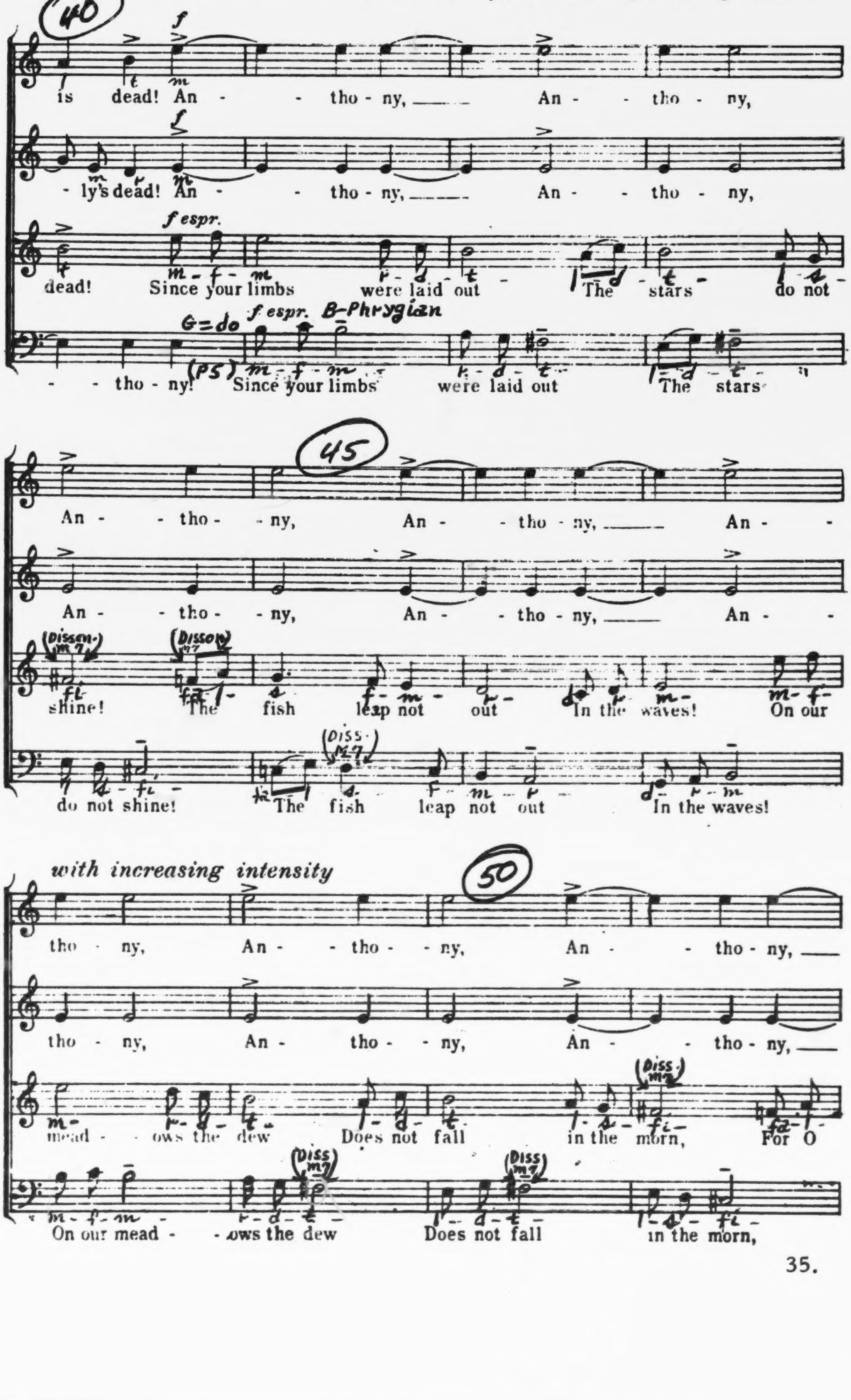
Permission to reproduce this copyrighted material has been granted by G. Schirmer, Inc. (copyright owner) to the Educational Resources Center (ERIC) and to the organization operating under contract with the Office of Education to reproduce ERIC documents. Reproduction by users of any copyrighted material contained in documents disseminated through the ERIC system requires permission of the copyright owner.

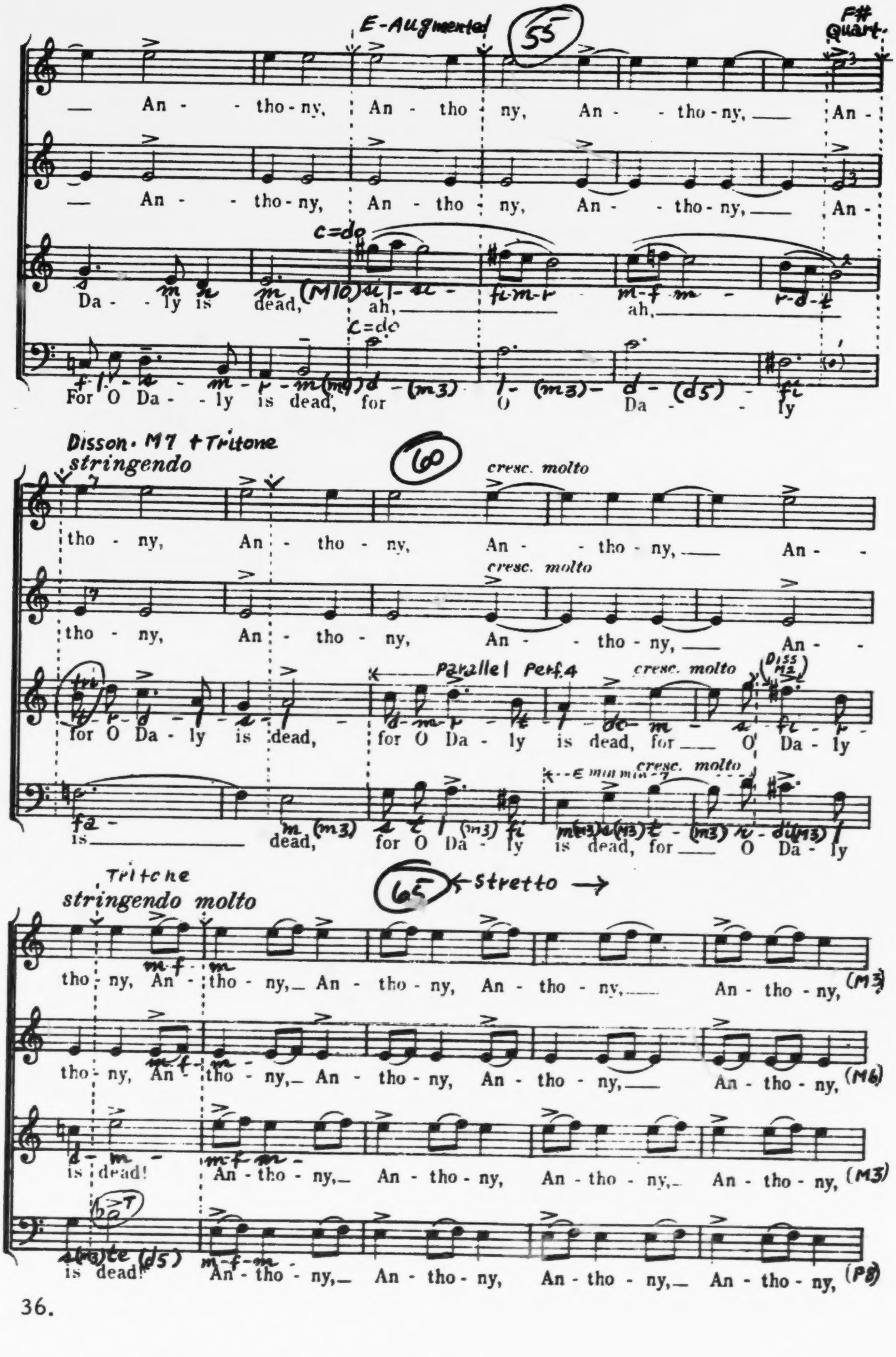
♩ = 76
mf espr.
Soprano
Alto
Tenor
Bass
1
E-Phrygian (mi to mi-altered "fa") Relate to C Maj
Disson. Maj+min 9
Since your limbs were laid out The stars do not shine! The
m f m r d t l d t l s fi fa l
mf
E-Pedal with 5-meas. Phrases
An-tho-ny, An-tho-ny, An-
5
Disson. Maj-9
fish leap not out In the waves!
f m r m
mf espr
B-Phrygian - Relative to G Maj
(M6) m f m r d
On our mead-ows the dew
(M2)
mf espr.
E Phrygian - Relate to C Maj
m f m
On our mead-ows the dew Does not
tho-ny, An-tho-ny, An-tho-ny,
Disson. Maj 9
10
Does not fall in the morn, For O Da-ly is dead! (M6
l d t l s fi fa l si m r m
fall in the morn, For O Da-ly is dead, (m6
t l s fi fa m
An-tho-ny, An-tho-ny, An


E Aug.
15
Variation of motive - "A" melodic minor (C = do - Raised 6 = fi, raised 7 = si
Not a flow'r can be born! Not a word can be said! Not a tree have
Disson. M2 & min. 2
for (m3) O (m3) Da - (d5) ly is
- tho - ny, An - tho - ny, An - tho - ny, An -
più f
E-Phrygian
20
Diss. M9
On our mead - ows the dew Does not fall in the
B-Phrygian - G = do
a leaf! (M9) On our mead - ows the dew Does not fall
dead! (m9) On our mead - ows the dew Does not fall
- tho - ny, An - tho - ny, An - tho -
"Dorian" goal tones circled in Sop. & Ten.
Relate to "D" maj
25
mf cresc. poco a poco
morn, For O Da - ly is dead, (P4) for O Da - ly is
in the morn, For O Da - ly is dead, for O Da - ly
Chromatic
"E" Transposed Dorian - "D" = do
(M2) in the morn, For O Da - (m3) ly is dead,
ny, An - tho - ny, An - tho - ny

Disson. 7-9
Disson.
dead, for O Da - ly is dead, for O Da - ly is
D = do
is dead, (P5) for O Da - ly's dead, for O Da - ly is dead,
mf cresc. poco a poco
for O Da - ly is dead, for O Da - ly is dead,
An - tho - ny, An - tho - ny, An -
30
Disson. 9, 7
ten.
A-melodic minor C = do
dead, for O Da - ly is dead, (M3) ah,
f C = do (E Phrygian)
for O Da - ly's dead, for O Da - ly is dead, for O
C = do (E Phryg.
for O Da - ly is dead, for O Da - ly is dead, (P5) O
tho - ny, An - tho - ny, An - tho ny, An -
35
Disson. min 9, min 7
ah, for O Da - ly is dead, for O Da - ly
Da - ly, (M3) for O Da - ly is dead, for O Da -
Da (d5) ly (m3) is dead, is
tho - ny, An - tho - ny, An - tho - ny, An -

"E" Transposed pedal in Alto & Sop. - 5-meas. Phrases.


40
f
l t m
is dead! An - - tho - ny, An - - tho - ny,
m r m
- ly's dead! An - - tho - ny, An - - tho - ny,
f espr.
m - f - m r - d - t - l d t - l s
dead! Since your limbs were laid out The stars do not
G=do f espr. B-Phrygian
(P5) m - f - m r - d - t l d t
- - tho - ny! Since your limbs were laid out The stars
45
An - - tho - - ny, An - - tho - ny, An -
An - - tho - - ny, An - - tho - ny, An -
(Dissonance m7) (Disson m7)
fi fa l s f m r d s m m f
shine! The fish leap not out In the waves! On our
(DISS m7)
l d fi fa l s f m r d r m
do not shine! The fish leap not out In the waves!
with increasing intensity
50
tho - ny, An - - tho - - ny, An - - tho - ny,
tho - ny, An - - tho - - ny, An - - tho - ny,
(Diss m7)
m r d t l d t l s fi fa l
mead - ows the dew Does not fall in the morn, For O
(Diss m7) (Diss m7)
m f m r d t l d t l s fi
On our mead - ows the dew Does not fall in the morn,


E-Augmented
55
F# Quart.
— An - - tho - ny, An - tho - ny, An - - tho - ny, — An -
— An - - tho - ny, An - tho - ny, An - - tho - ny, — An -
c=do
Da - - ly is dead, ah, — ah, —
s m m m (M10) si - si - fi - m - r m - f m - r - d - t
c=do
For O Da - - ly is dead, for O Da - - ly
t - l - - l - m - r - m (M4) d - (m3) l - (m3) - d - (d5) - fi
Disson. M7 + Tritone
stringendo
60
cresc. molto
tho - ny, An - tho - ny, An - - tho - ny, — An -
tho - ny, An - tho - ny, An - - tho - ny, — An -
Parallel Perf.4
Diss M2
for O Da - ly is dead, for O Da - ly is dead, for — O Da - ly
d - m - r - f - d - m - r - t - l - do - m - s - fi - r
E min min 7
is — dead, for O Da - ly is dead, for — O Da - ly
fa - m (m3) s - t - l (m3) fi m (m3) s (M3) t - (m3) r - di (M3) l
Tritone
stringendo molto
65
Stretto
tho - ny, An - tho - ny, — An - tho - ny, An - tho - ny, — An - tho - ny,
m - f - m
(M3)
tho - ny, An - tho - ny, — An - tho - ny, An - tho - ny, — An - tho - ny,
m - f - m
(M6)
is dead! An - tho - ny, — An - tho - ny, An - tho - ny, — An - tho - ny,
d - m - m - f - m
(M3)
T
is dead! An - tho - ny, — An - tho - ny, An - tho - ny, — An - tho - ny,
s - te (d5) m - f - m
(P8)

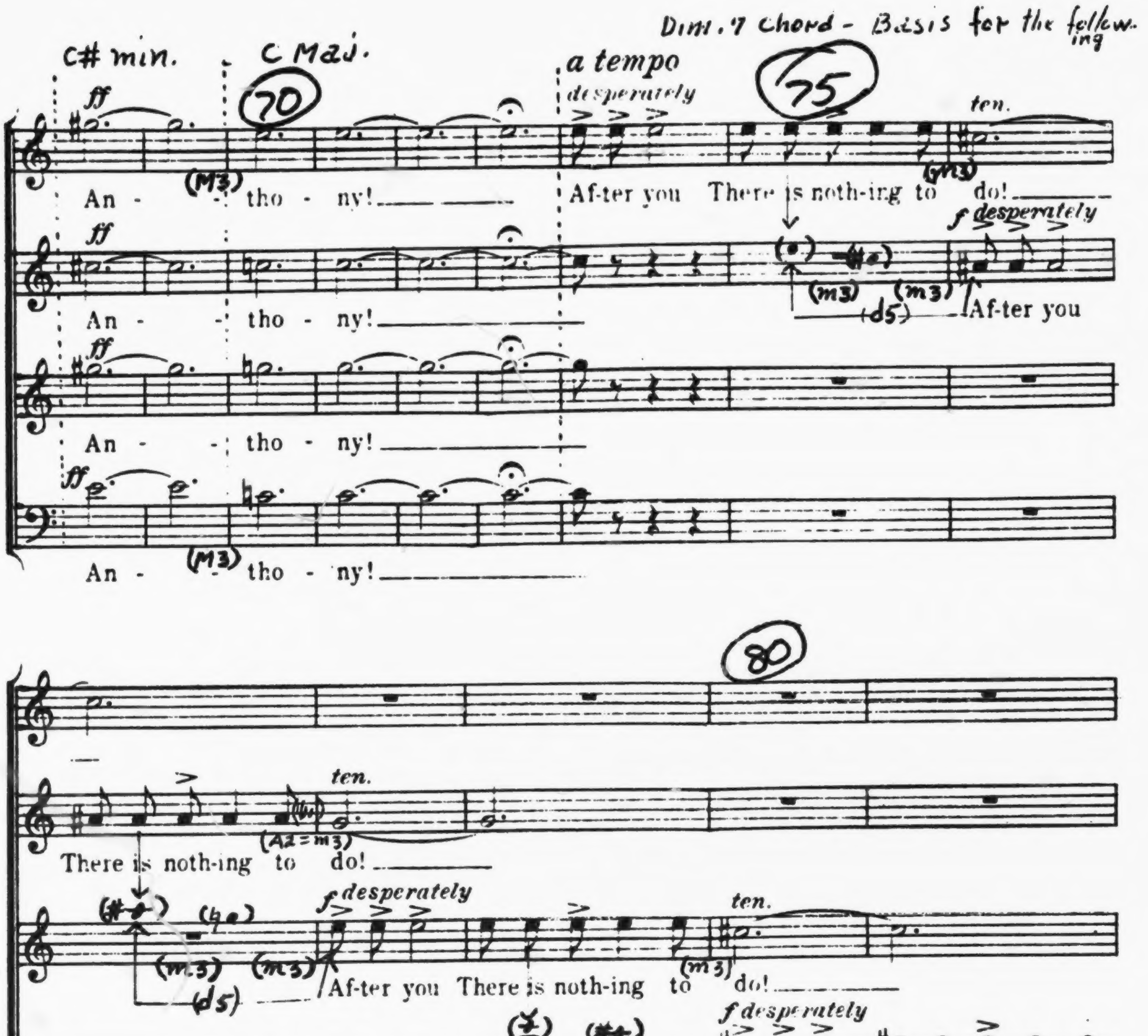

Dim. 7 chord - Basis for the following
C# min.
C Maj.
70
a tempo
desperately
75
ten.
ff
(M3)
An - tho - ny!
After you There is nothing to do!
f desperately
(m3) (m3) (d5)
80
There is nothing to do!
(A2=m3)
(m3) (m3) (d5)
After you There is nothing to do!
f desperately
(A2
C# dim. of B (V of E)
allargando molto
85
f
dim.
mf
sfp
pp
There is nothing but grief!
There is nothing, there is nothing but grief!
(M32)
do!
(m3)

TABLE I

"ANTHONY O DALY"--FORM

Section	Measures	Texture	Tonality
A	1-40	Bass pedal tone and motives in canon.	E, B, A
	1-7	Soprano motive and bass pedal.	E
	6-12	Two-part canon at the fourth above pedal tone.	E and B
	13-18	Two-part canon, pedal, and contrasting motive.	E, A
	19-24	Three-part canon at the fourth and second with pedal tones.	E, B, F (F#)
	25-32	Primary motive fragments stated in two-measure imitative, intensified, ascending patterns.	E
	33-40	Primary motive fragments in two-measure patterns of descending movement.	E
A^1	41-73	E pedal inverted to soprano and alto.	E
	41-53	Motive in two-part canon at the fourth with pedal tones.	E, B
	54-59	Primary motive in melisma with contrasting motive and pedal tones.	E, A
	60-63	Primary motive fragment stated in two-measure patterns of ascending direction and in parallel fourths with pedal tones.	E
	64-67	Initial two notes of motive in two-beat stretto-magadizing style, stringendo building to climax.	
	68-73	Climax, sustained-homophonic	C#, C
Closing	74-78	Descending, wide-spaced imitative entrances, based on members of chordal structure.	E

TABLE II

"ANTHONY O DALY"--RHYTHMIC FEATURES AND RELATED SKILLS

Feature	Measures	Related Skill (A detail of these skills is given in Table XIII, p. 83.)
1. Poly-accented rhythms resulting from close points of canonic entries in two and three voices.	7, 19, 41, 64	1. Perform poly-accented rhythms resulting from close canonic entrance points.
2. Rhythmic overlapping of the above-mentioned melodic rhythms against the pedal tone rhythm of two-beat sounds are sustained on the first, third, and second pulses of alternate measures.	Common throughout	2. Perform motive and pedal tone patterns involving rhythmic overlapping.
3. Syncopated patterns in closing section.	76, 78, 80, 82	3. Perform rhythms involving syncopation.

TABLE III

"ANTHONY O DALY"--MELODIC-PITCH FEATURES AND RELATED SKILLS

Feature	Measures	Related skill (a detail of these is given in Table XIV, p. 87.)
1. Passages derived from Phrygian and natural minor scales.	0-12, 40-53	1. Perform melodic patterns based on natural minor Phrygian scales.
2. Motive variation based on natural and melodic minor scale patterns	13-18, 33-38 54-59	2. Perform melodic patterns based on natural and melodic scales.
3. Progression of motive fragment referent tones based on Dorian scale.	25-32	3. Perform embellished progressions of Dorian scale patterns.
4. Disjunct patterns	12-13, 18-19, 25-26, 35-36 53-54, 56-57 63-64	4. Perform disjunct interval patterns consisting of major sixth minor sixth, major ninth, minor ninth, augmented fourth, diminished fifth, major third, and minor third.
5. Entries after mixed durations of rest.	1-7, 8-19, 75-82	5. Perform entering pitches after one or more measure's rest.

TABLE IV

"ANTHONY O DALY"--HARMONIC FEATURES AND RELATED SKILLS

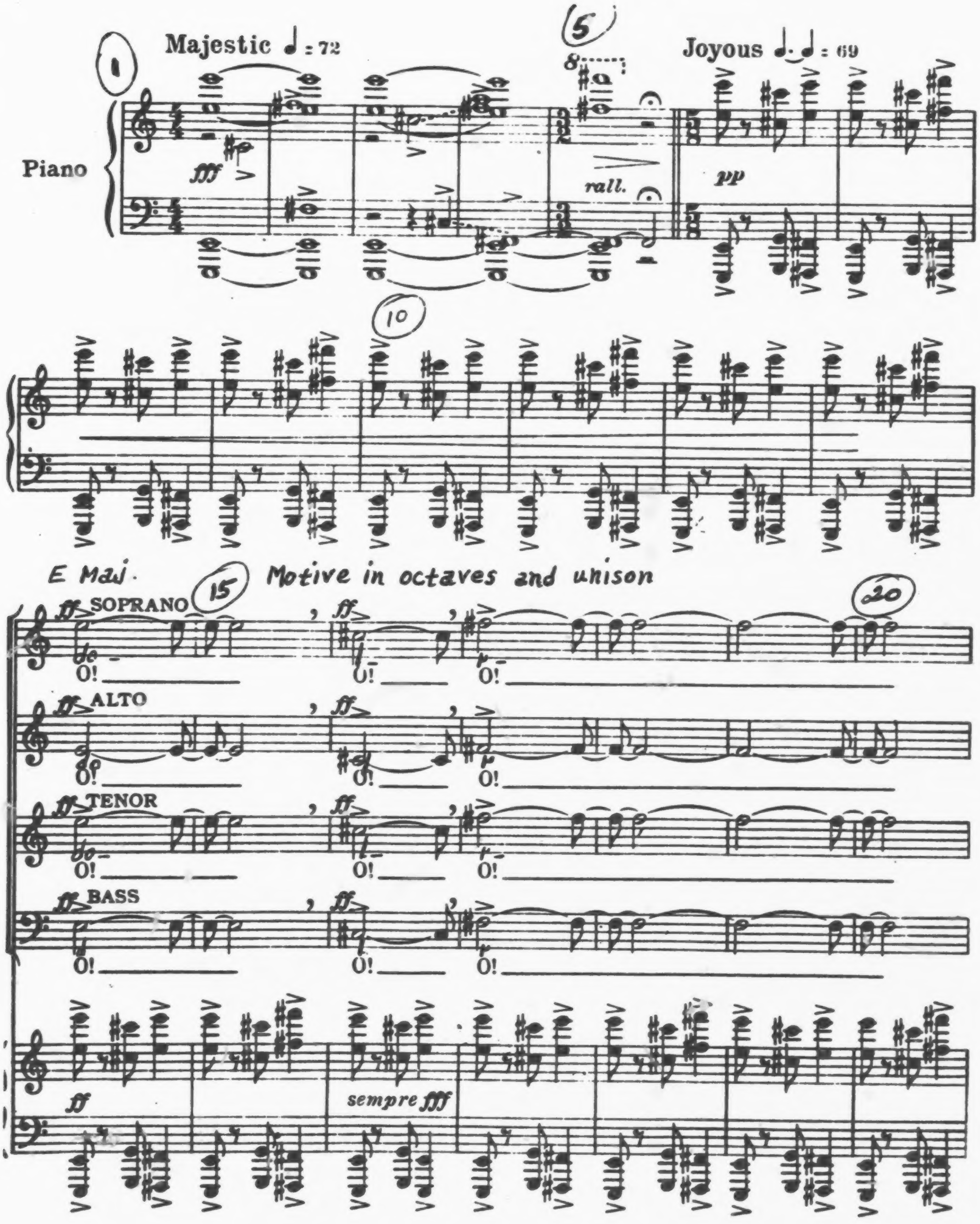
Feature	Measures	Related Skill (A detail of these skills is given in Table XV, p. 92.)
1. Augmented chords	13, 34, 54	1. Perform chords of augmented quality. a. Arpeggiated chords. b. Any pitch of augmented triads built on a given pitch.
2. Vertical sonorities of seconds, sevenths, and ninths.	4, 9, 10, 16, 20 21, 24, 36	2. Perform melodic and harmonic intervals of seconds, sevenths, and ninths.
3. Sudden transition from unison E to C# minor to C major.	67-70	3. Perform abrupt shifts in tonality from unison E to the appropriate pitch of C# minor chord to appropriate pitch of C major chord.
4. Diminshed seventh chords.	Closing section	4. Perform diminished seventh chords from any given pitch. a. Arpeggiated seventh chords. b. Any pitch of diminished seventh sonorities. c. Descend through a series of diminished seventh chords.
5. Motive fragments in parallel perfect fourth progressions.	60-62	5. Perform melodic lines in parallel perfect fourth progressions with another voice part.

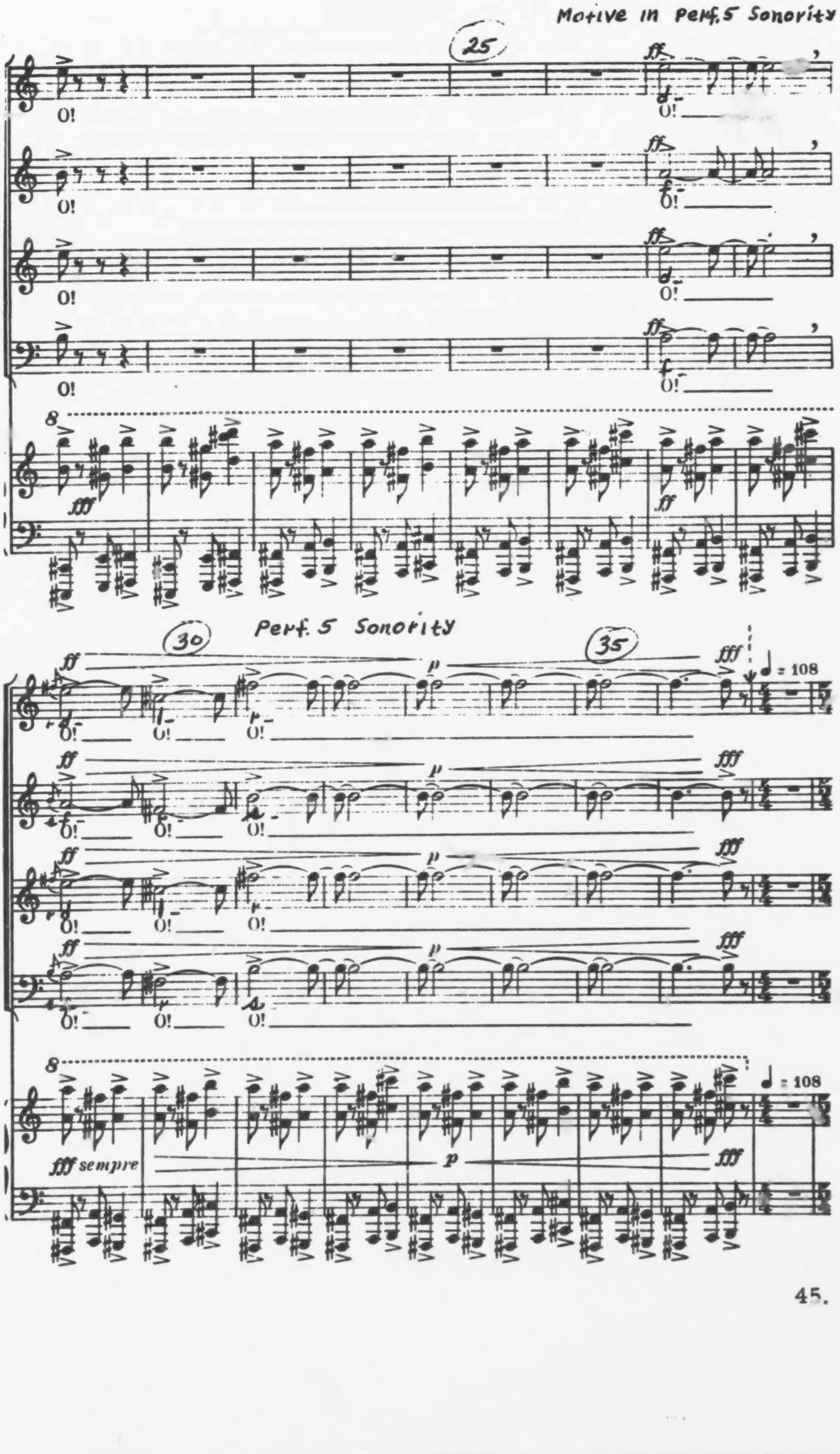
A Jubilant Song
by Norman Dello Joio

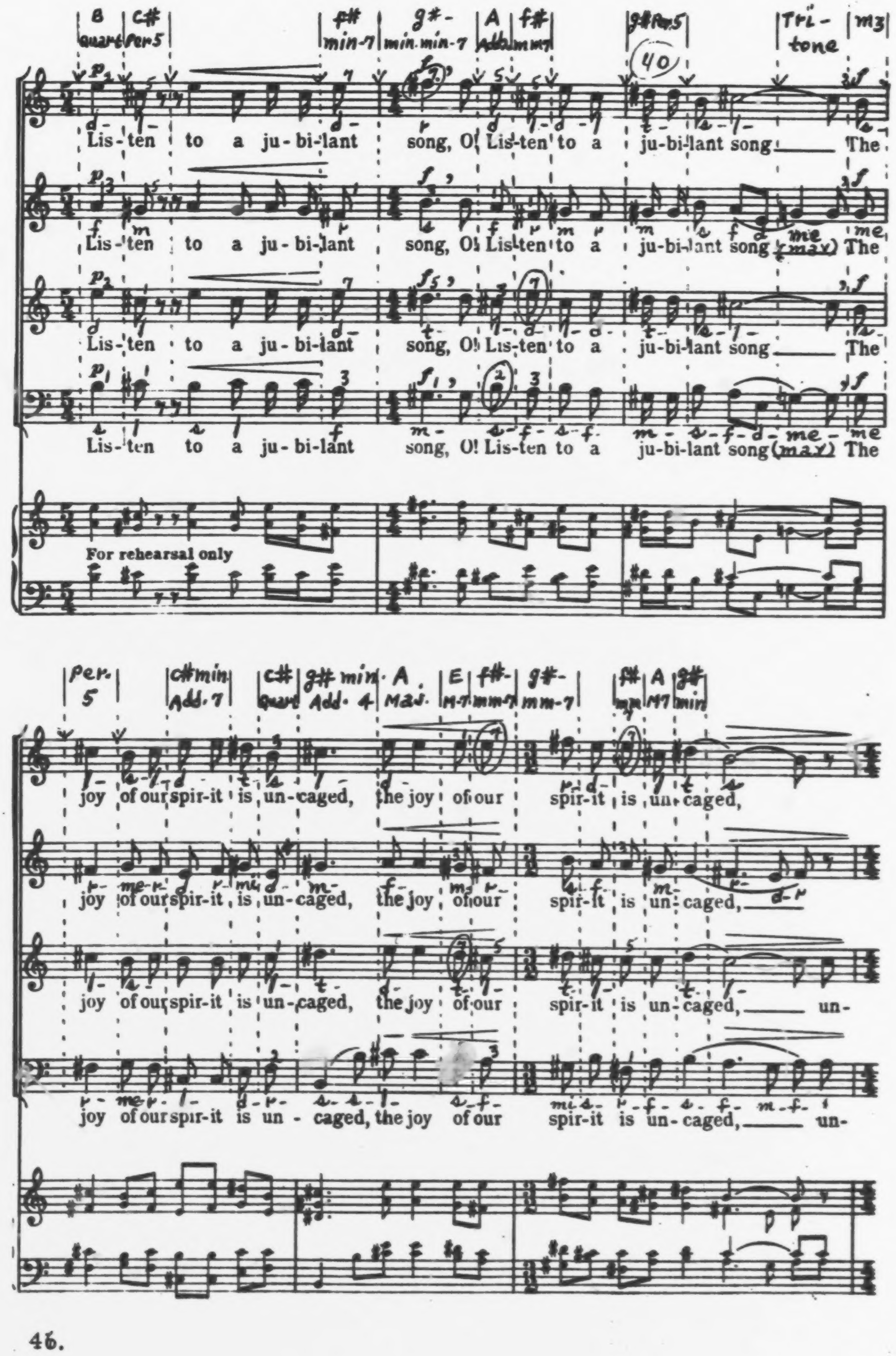
Adapted from Walt Whitman

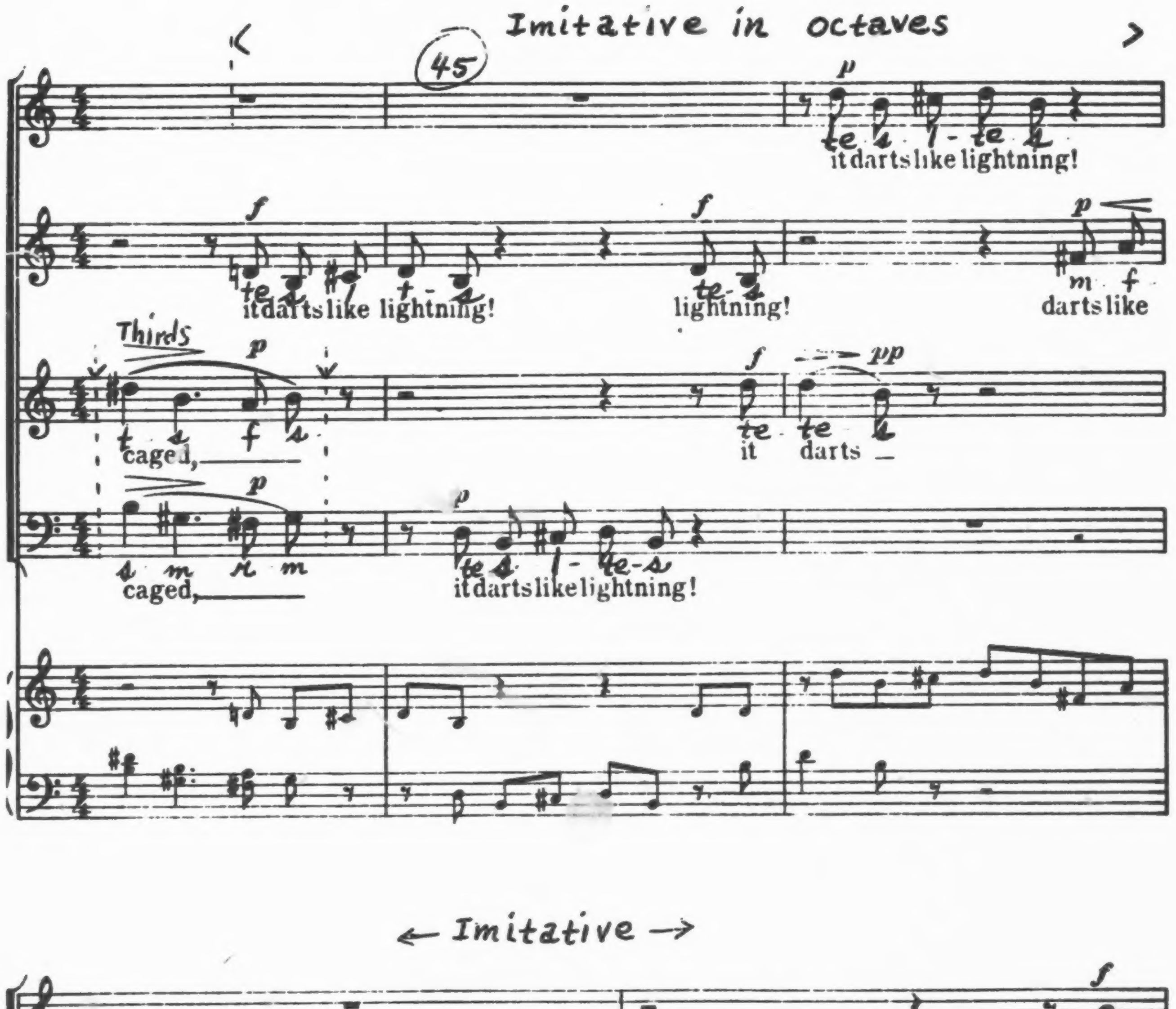
Copyright, 1946, by G. Schirmer Inc.

Permission to reproduce this copyrighted material has been granted by G. Schirmer, Inc. (copyright owner) to the Educational Resources Information Center (ERIC) and to the organization operating under contract with the Office of Education to reproduce ERIC documents. Reproduction by users of any copyrighted material contained in documents disseminated through the ERIC system requires permission of the copyright owner.


1
Majestic ♩ = 72
5
Joyous ♩. ♩ = 69
Piano
fff
rall.
pp
10
E Maj.
Motive in octaves and unison
15
20
SOPRANO
ALTO
TENOR
BASS
ff
O!
sempre fff

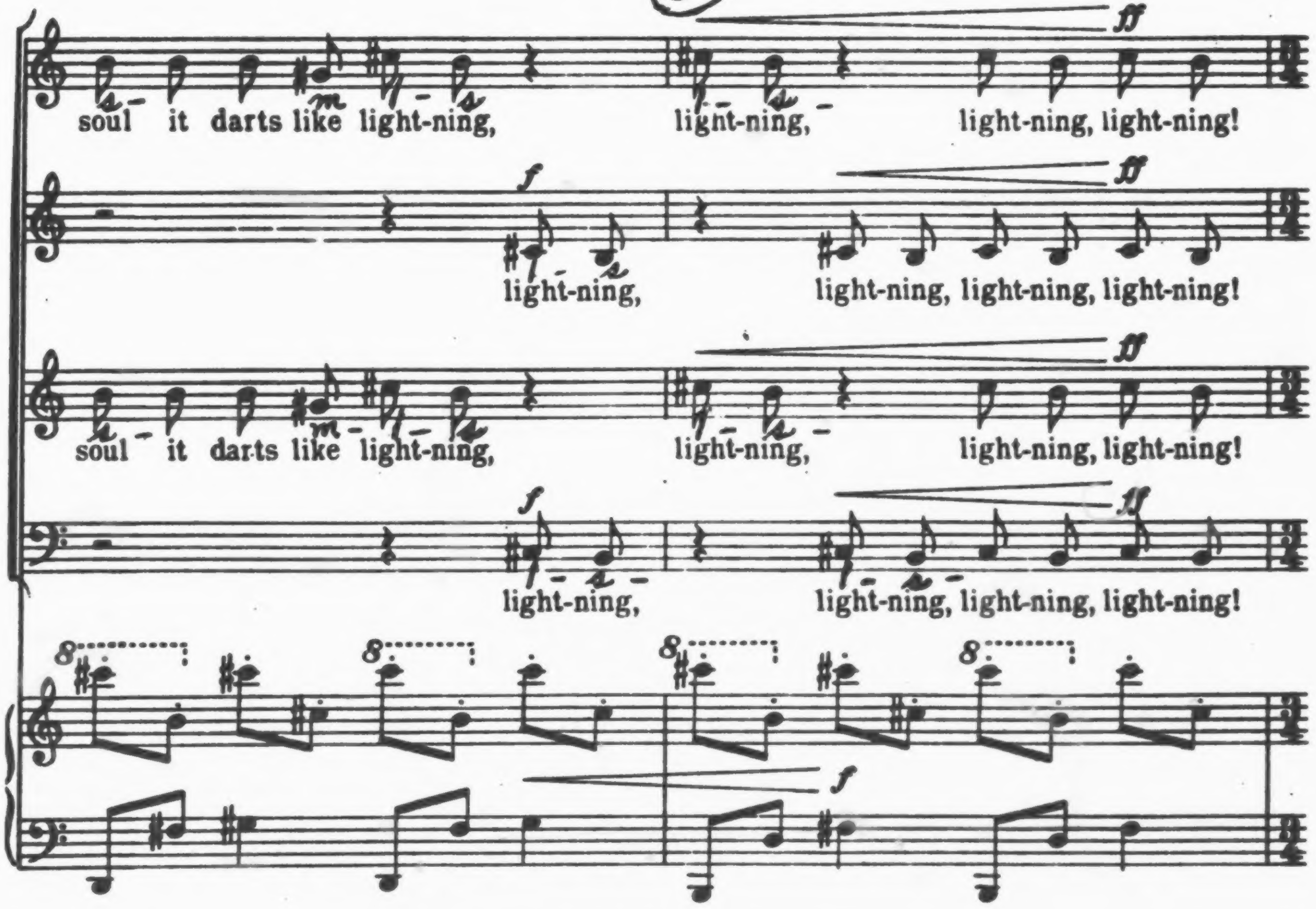

Motive in Perf. 5 Sonority
25
O!
ff
8
fff
Perf. 5 Sonority
30
35
p
fff
♩ = 108
fff sempre


B quart
C# Per5
f# min-7
g#- min.min-7
A Add
f# mm7
g# Per5
40
Tri-tone
m3
Listen to a jubilant song, O! Listen to a jubilant song The
Listen to a jubilant song, O! Listen to a jubilant song (max) The
Listen to a jubilant song, O! Listen to a jubilant song The
Listen to a jubilant song, O! Listen to a jubilant song (max) The
For rehearsal only
Per. 5
c#min Add. 7
C# Quart
g# min. Add. 4
A Maj.
E M-7
f#- mm-7
g#- mm-7
f# mm
A M7
g# min
joy of our spirit is uncaged, the joy of our spirit is uncaged,
joy of our spirit is uncaged, the joy of our spirit is uncaged,
joy of our spirit is uncaged, the joy of our spirit is uncaged, un-
joy of our spirit is uncaged, the joy of our spirit is uncaged, un-


Imitative in octaves
45
Thirds
p
f
pp
te s l te s
it darts like lightning!
te s l te s
it darts like lightning!
t s
lightning!
te s
lightning!
m f
darts like
t s f s
caged,
te te
it darts
te s
s m r m
caged,
← Imitative →
s
My
r f
light-ning, light-ning, light-ning, light-ning,
(m3)
light-ning, light-ning, light-ning!
s te
light-ning,
te s
light-ning,
te s (m3)
light-ning, light-ning, light-ning!
My
s te
light-ning,
te s
light-ning,
8

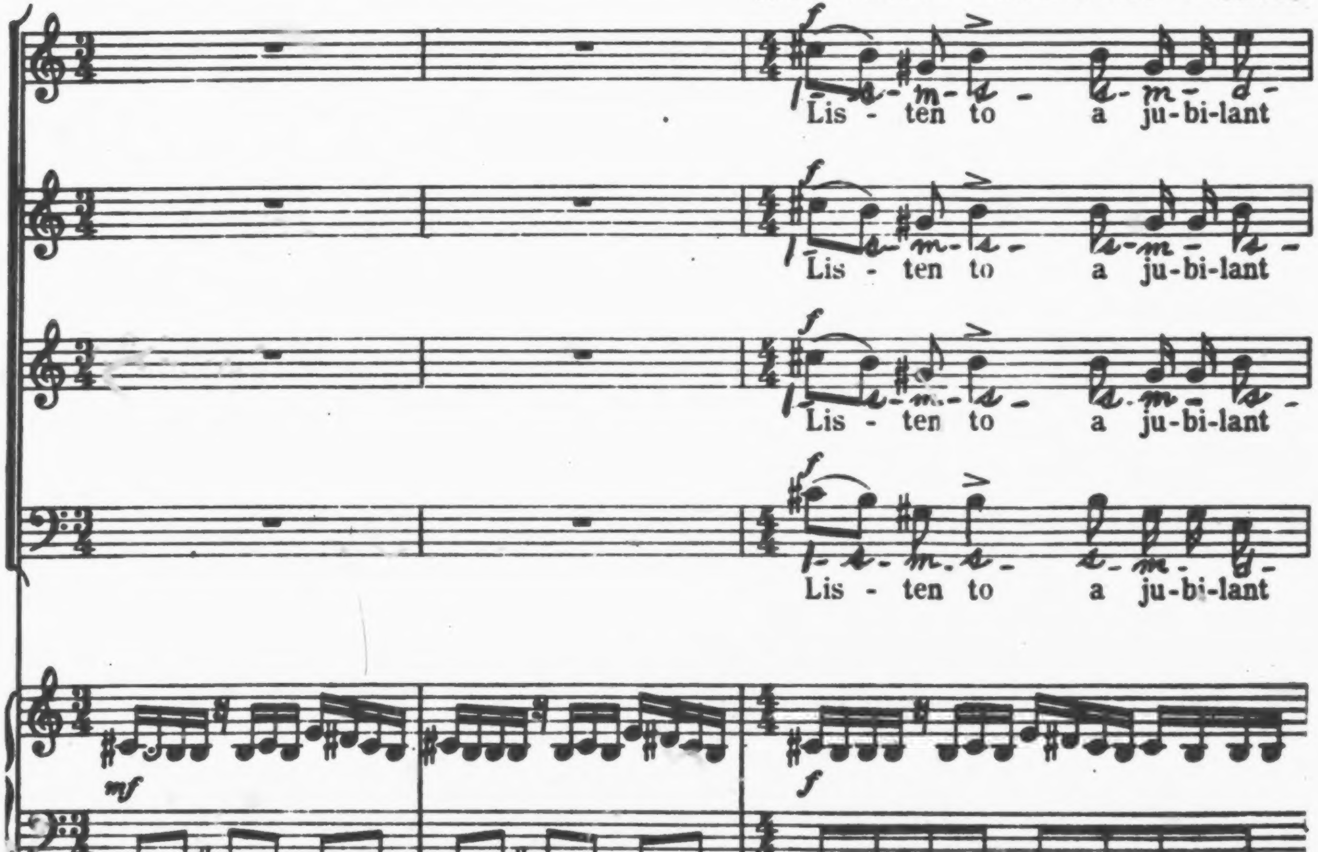
Imitative, in octaves and unison

㊿

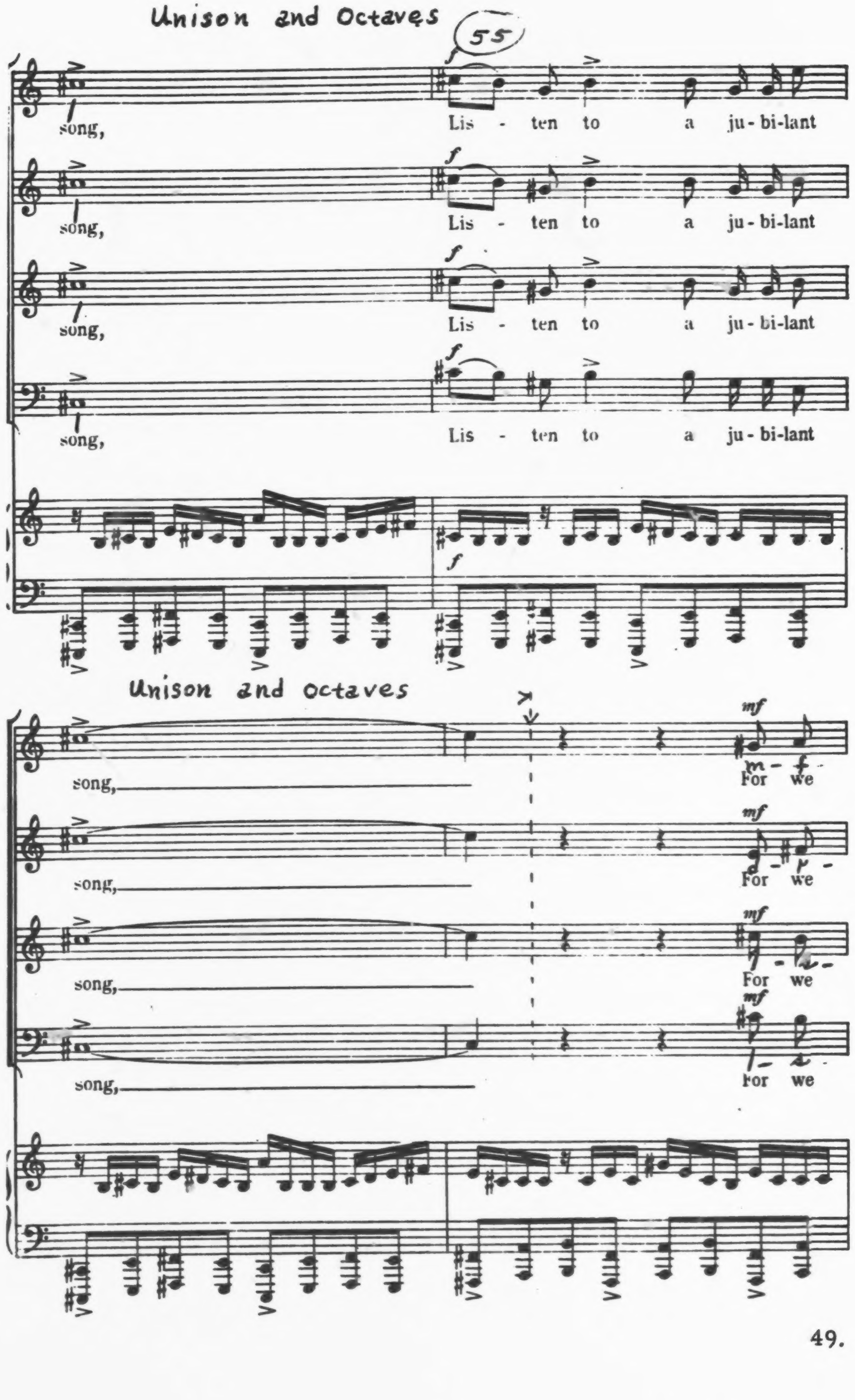


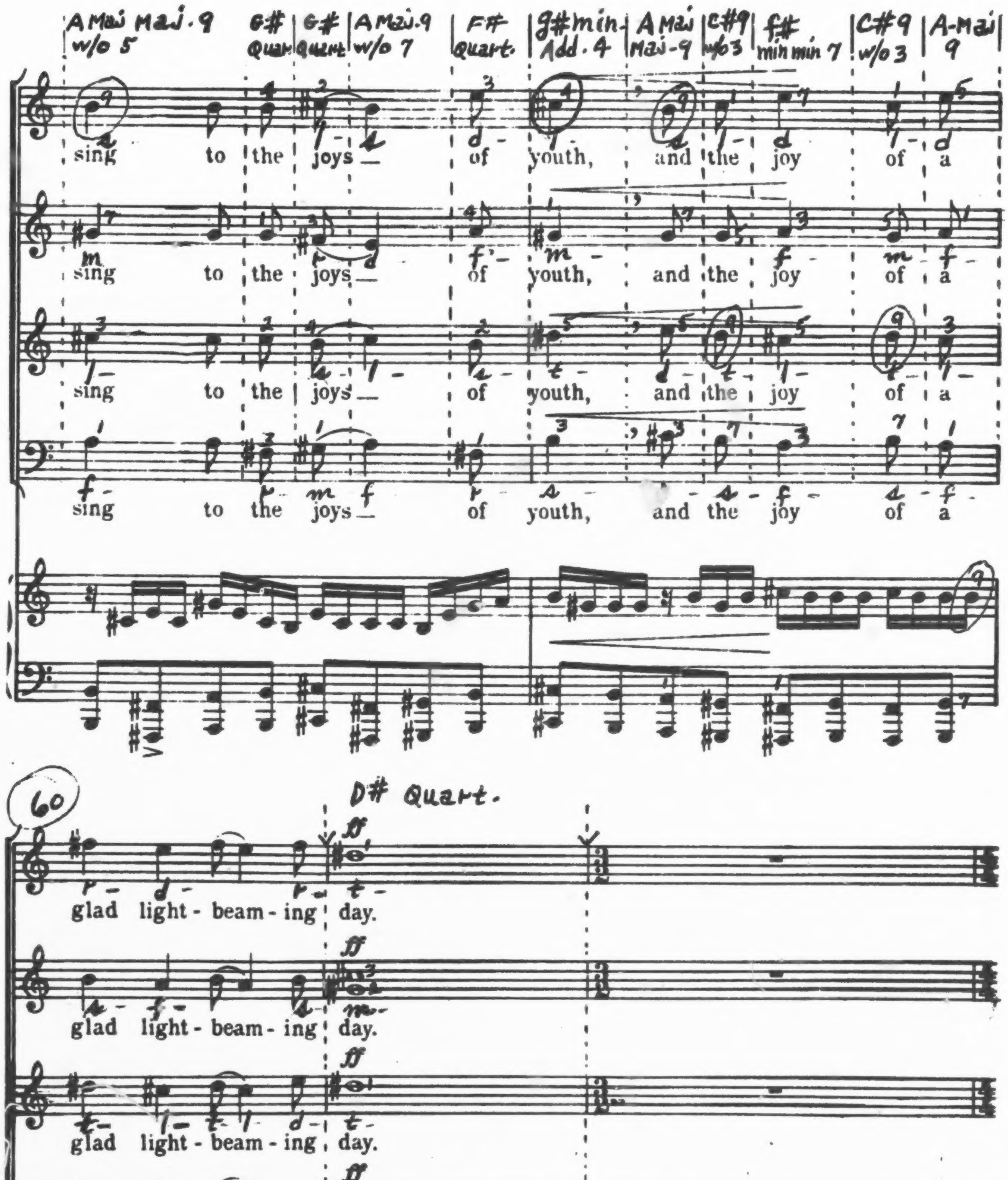
ff
soul it darts like light-ning, light-ning, light-ning, light-ning!
f
ff
light-ning, light-ning, light-ning, light-ning!
ff
soul it darts like light-ning, light-ning, light-ning, light-ning!
f
ff
light-ning, light-ning, light-ning, light-ning!
8
8
8
8
f

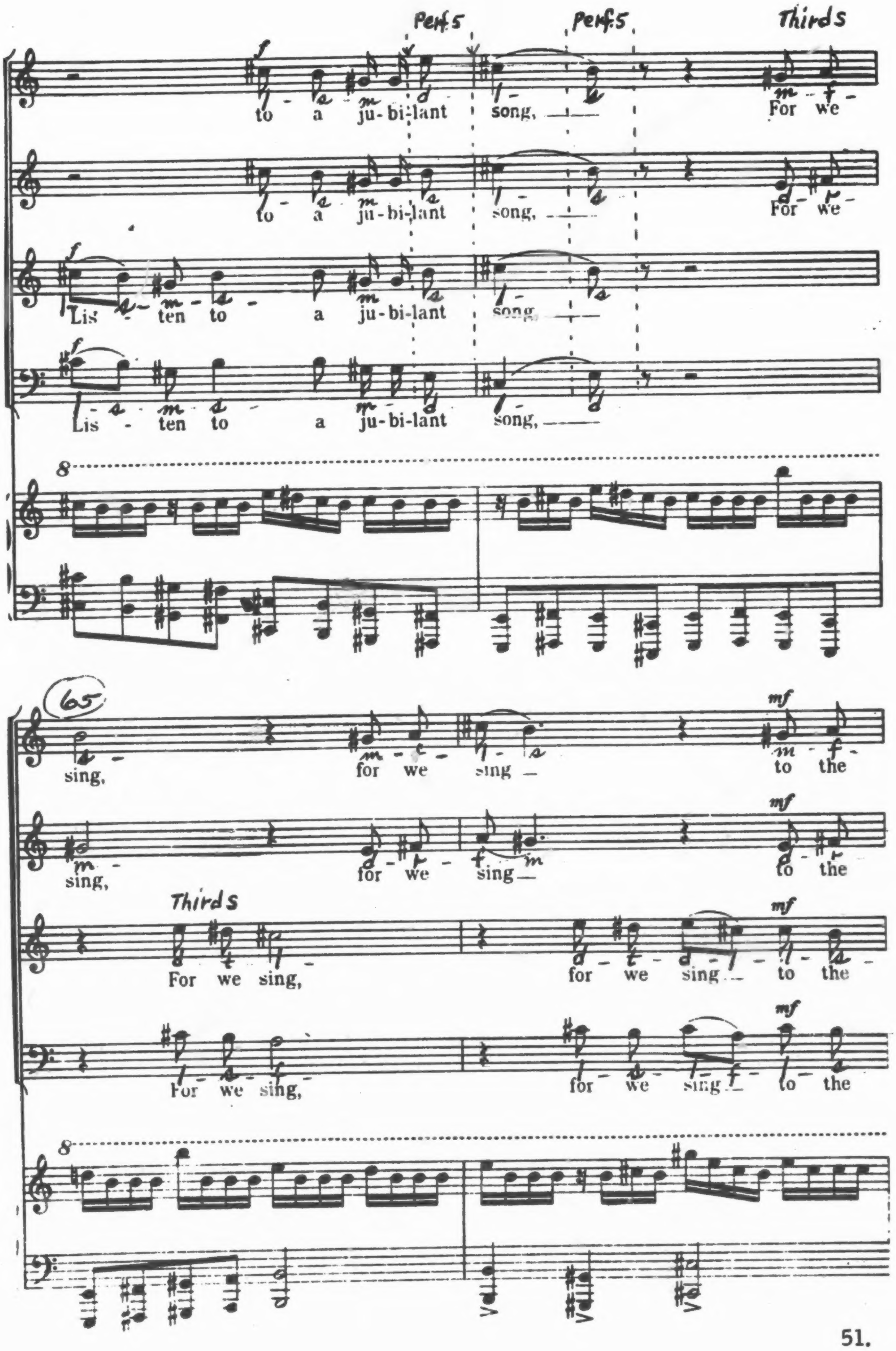
Homophonic - Unison and octaves



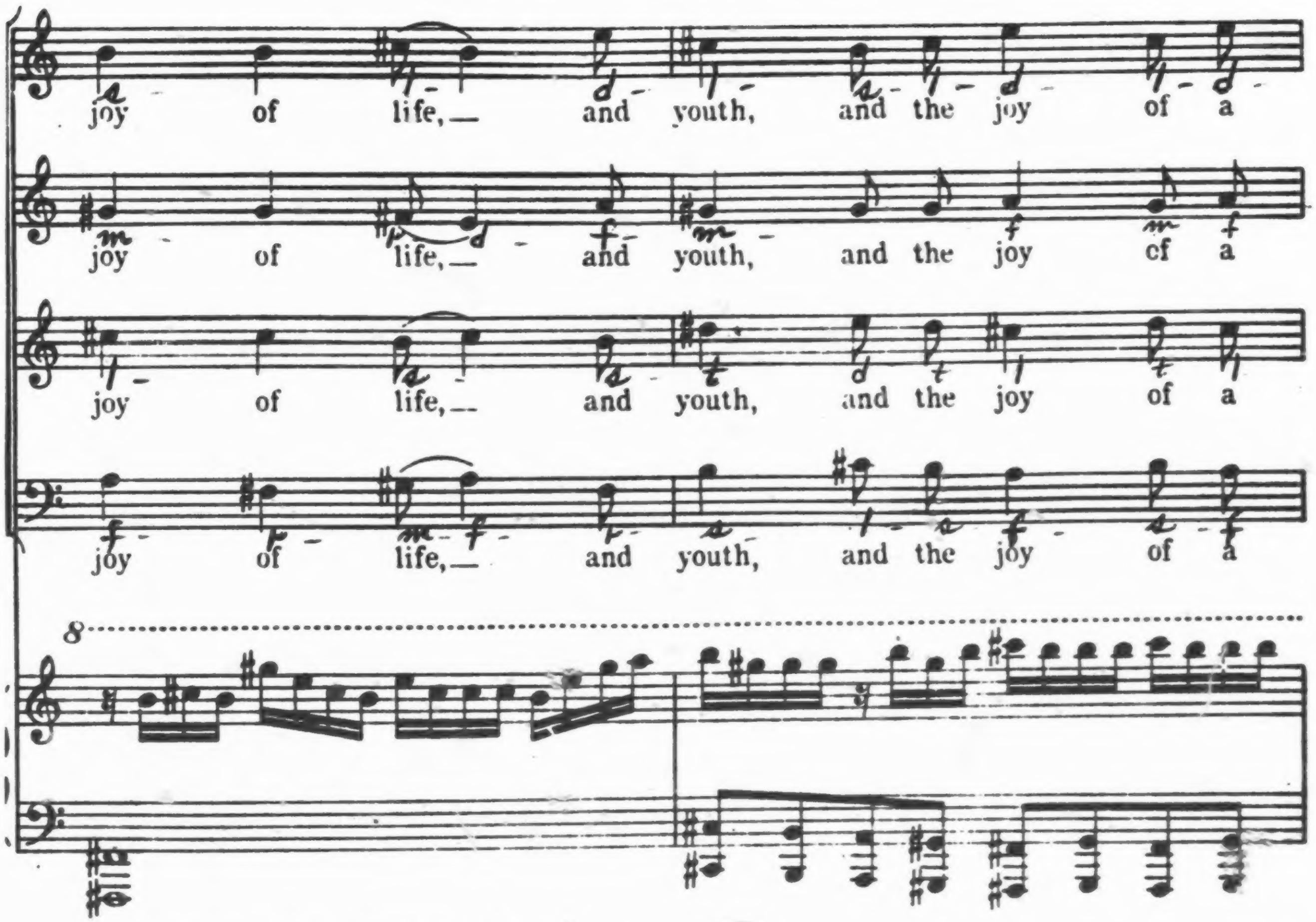
f
Lis - ten to a ju-bi-lant
f
Lis - ten to a ju-bi-lant
f
Lis - ten to a ju-bi-lant
f
Lis - ten to a ju-bi-lant
mf
f


Unison and Octaves
55
song,
Lis - ten to a ju - bi - lant
song,
Lis - ten to a ju - bi - lant
song,
Lis - ten to a ju - bi - lant
song,
Lis - ten to a ju - bi - lant
f
Unison and Octaves
song,
For we
song,
For we
song,
For we
song,
For we
mf
m - f

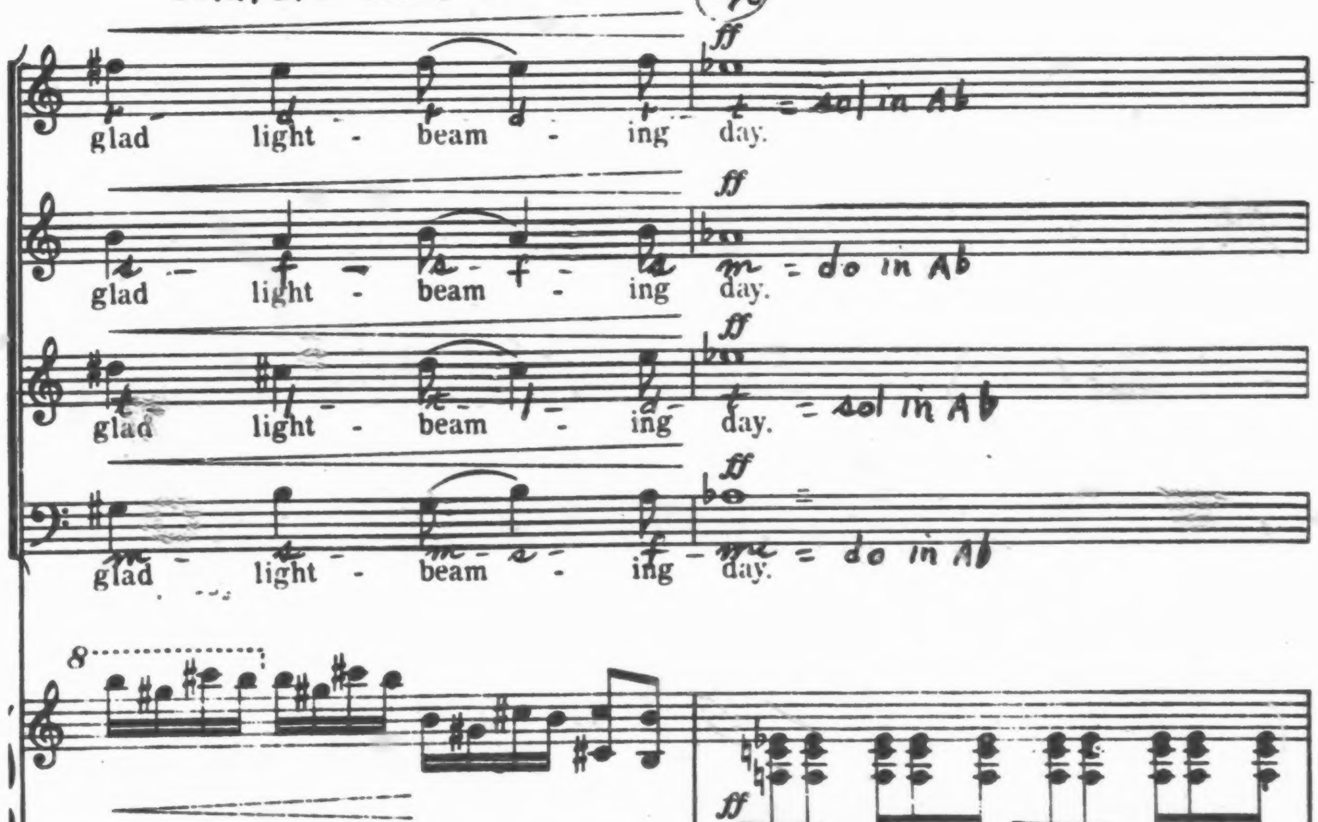

A Maj Maj.9 w/o 5
G# Quart
G# Quart
A Maj.9 w/o 7
F# Quart.
g# min Add.4
A Maj Maj-9
C#9 w/o3
f# min min 7
C#9 w/o 3
A-Maj 9
sing to the joys — of youth, and the joy of a
sing to the joys — of youth, and the joy of a
sing to the joys — of youth, and the joy of a
sing to the joys — of youth, and the joy of a
60
D# Quart.
ff
glad light-beam-ing day.
glad light-beam-ing day.
glad light-beam-ing day.
glad light-beam-ing day.
8

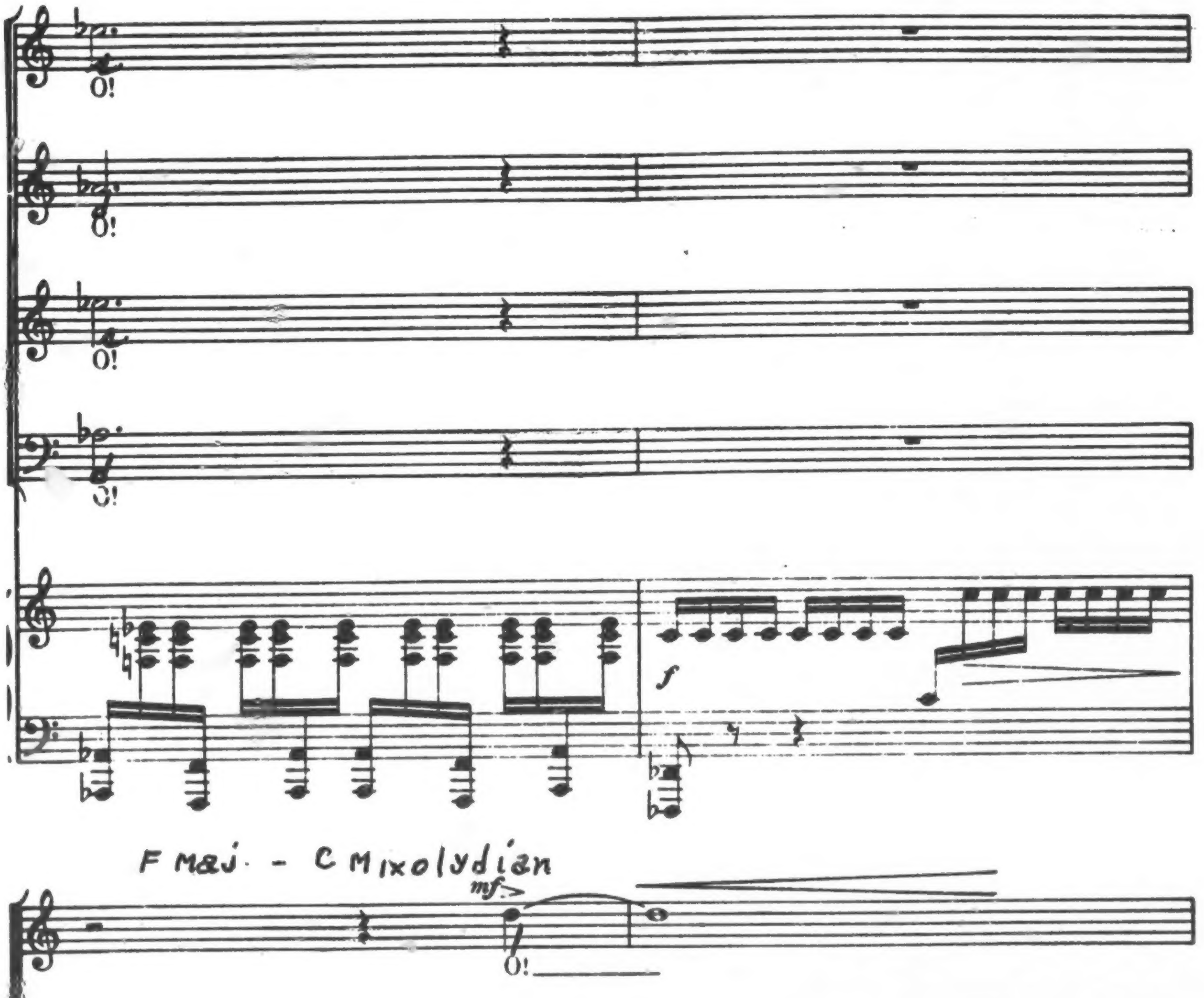

Perf.5
Perf.5
Thirds
f
to a ju-bi-lant song, — For we
to a ju-bi-lant song, — For we
Lis - ten to a ju-bi-lant song, —
Lis - ten to a ju-bi-lant song, —
8
65
mf
sing, for we sing — to the
sing, for we sing — to the
Thirds
For we sing, for we sing — to the
For we sing, for we sing — to the
8

Compare with meas. 58 - 59


joy of life, and youth, and the joy of a
s l d l s l d l d
joy of life, and youth, and the joy of a
m d f m f m f
joy of life, and youth, and the joy of a
l s s t d t l t l
joy of life, and youth, and the joy of a
f r m f r s l s f s f
8

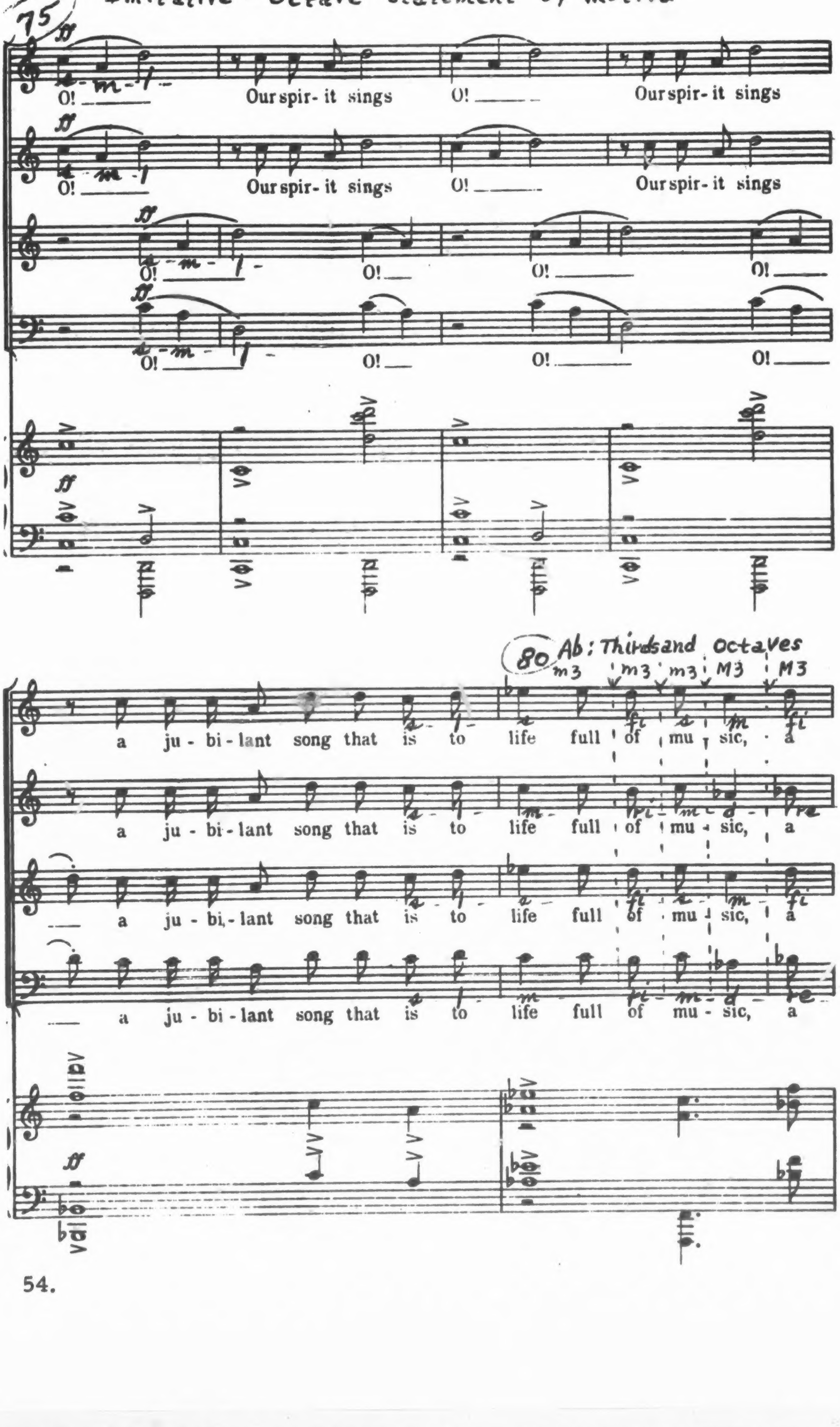
Compare meas. 60 - 61


70
ff
glad light - beam - ing day.
r d r d r t = sol in Ab
glad light - beam - ing day.
s f s f s m = do in Ab
glad light - beam - ing day.
t l t l d t = sol in Ab
glad light - beam - ing day.
m m s f m = do in Ab
8
ff

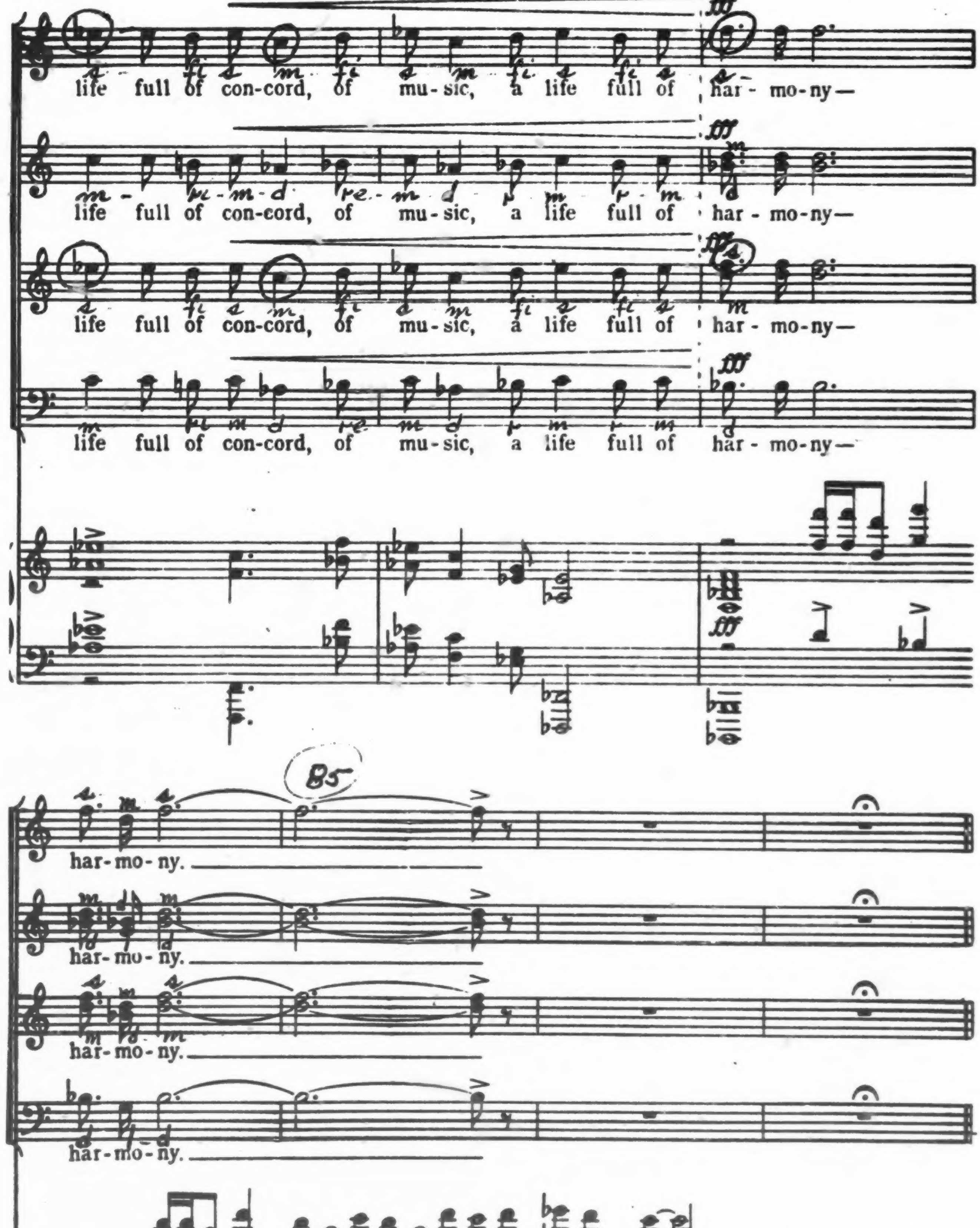

O!
O!
O!
O!
f
mf
O!
O!
O!
O!
mf
8

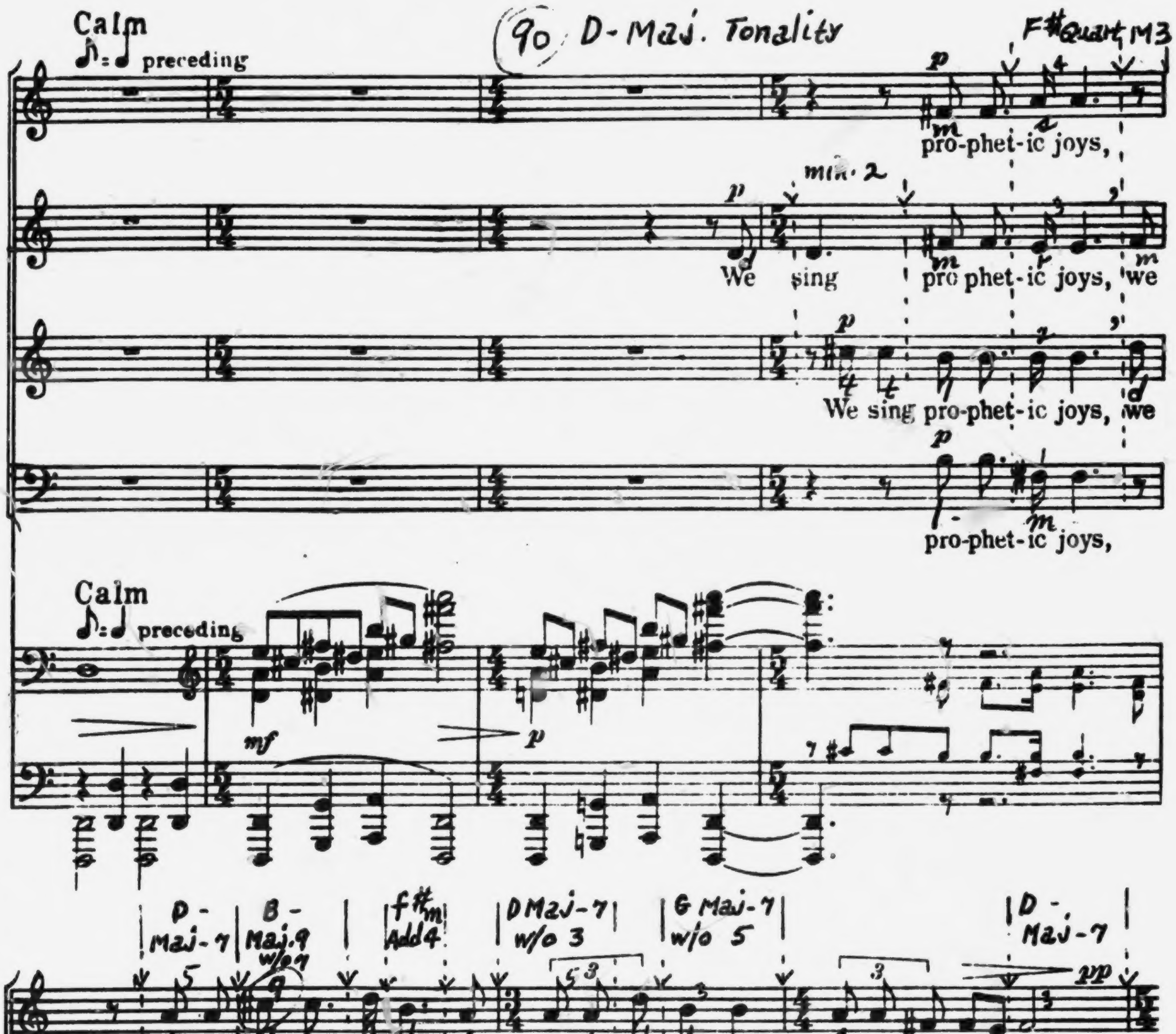
F Maj - C Mixolydian

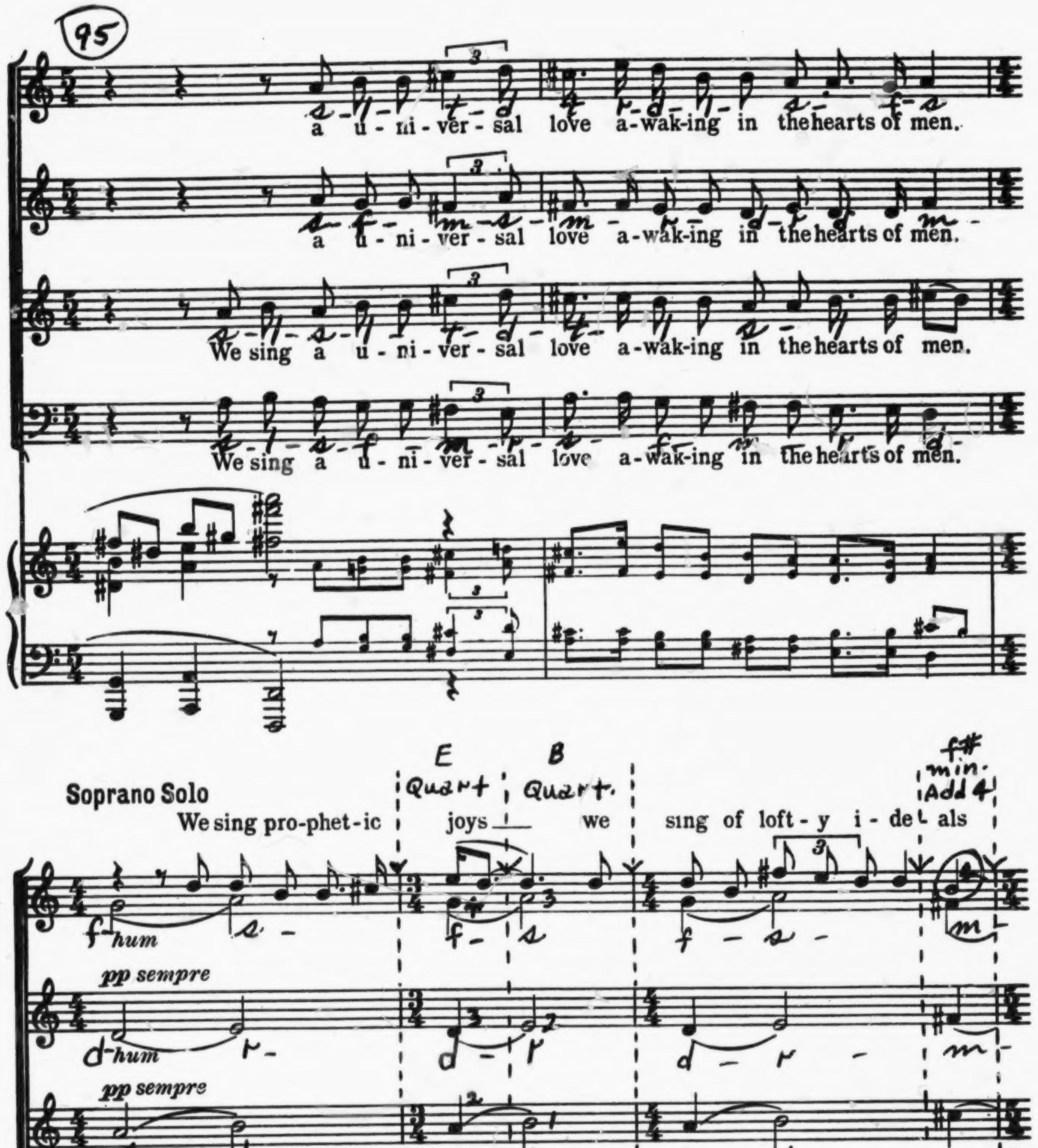
Imitative - Octave statement of motive

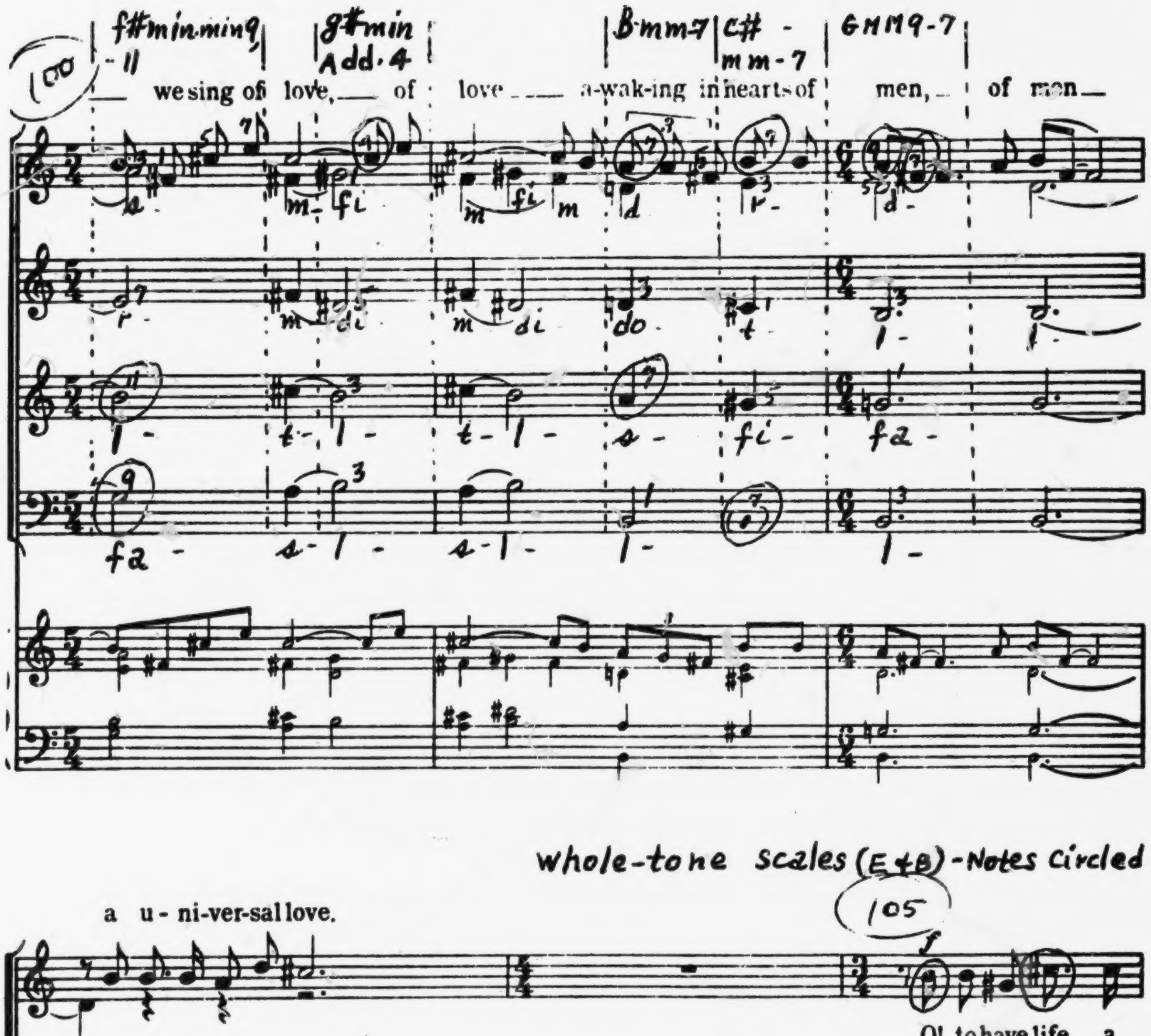

75
ff
O! Our spir- it sings O! Our spir- it sings
O! O! O! O!
s m l
80 Ab: Thirds and Octaves
m3 m3 m3 M3 M3
a ju - bi - lant song that is to life full of mu - sic, a
s l fi s m fi
m fi m d re

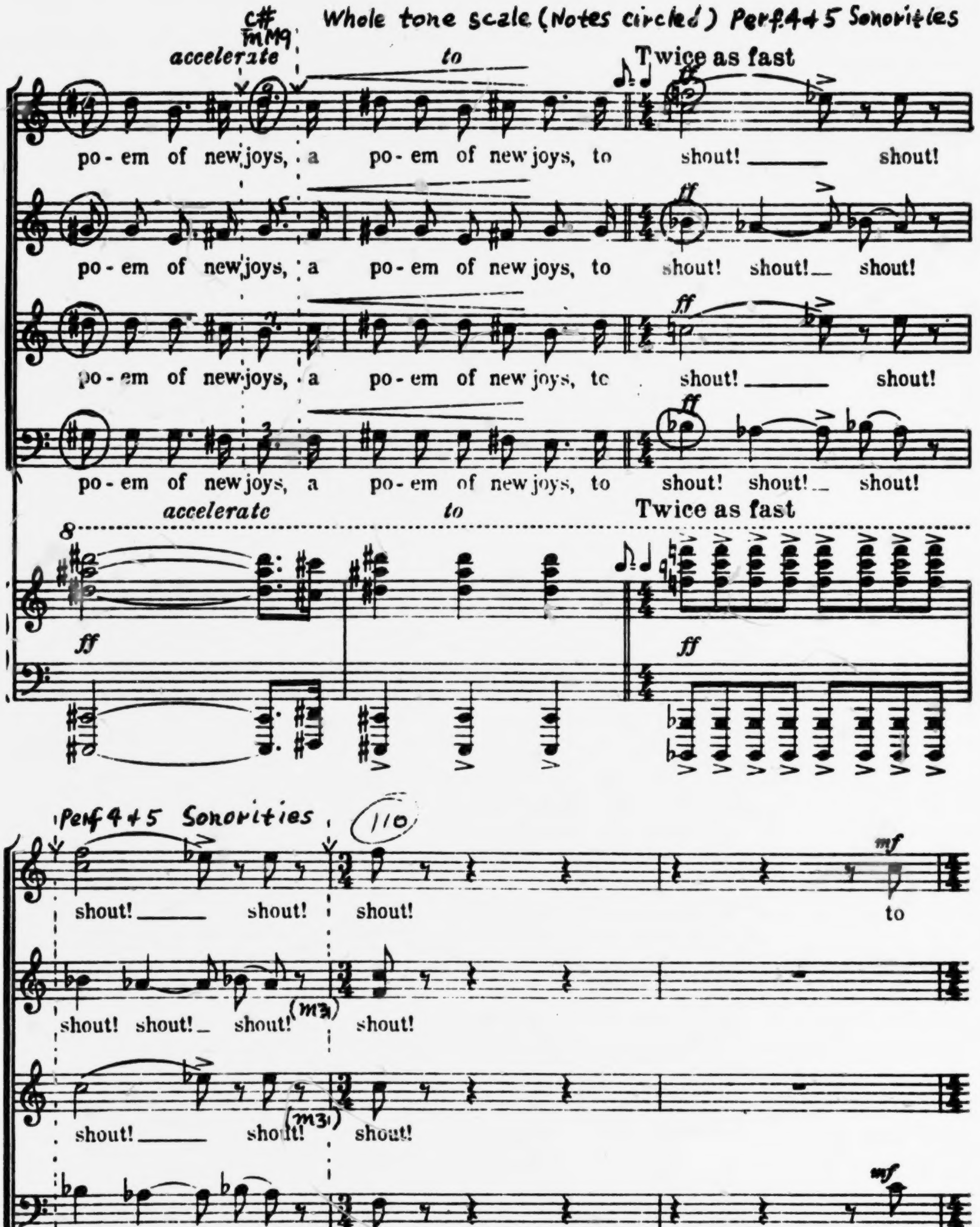
Third Sonorities : Motive tones circled   Bb Maj.


fff
life full of con-cord, of mu-sic, a life full of har-mo-ny—
life full of con-cord, of mu-sic, a life full of har-mo-ny—
life full of con-cord, of mu-sic, a life full of har-mo-ny—
life full of con-cord, of mu-sic, a life full of har-mo-ny—
85
har-mo-ny.
har-mo-ny.
har-mo-ny.
har-mo-ny.
rall.
p

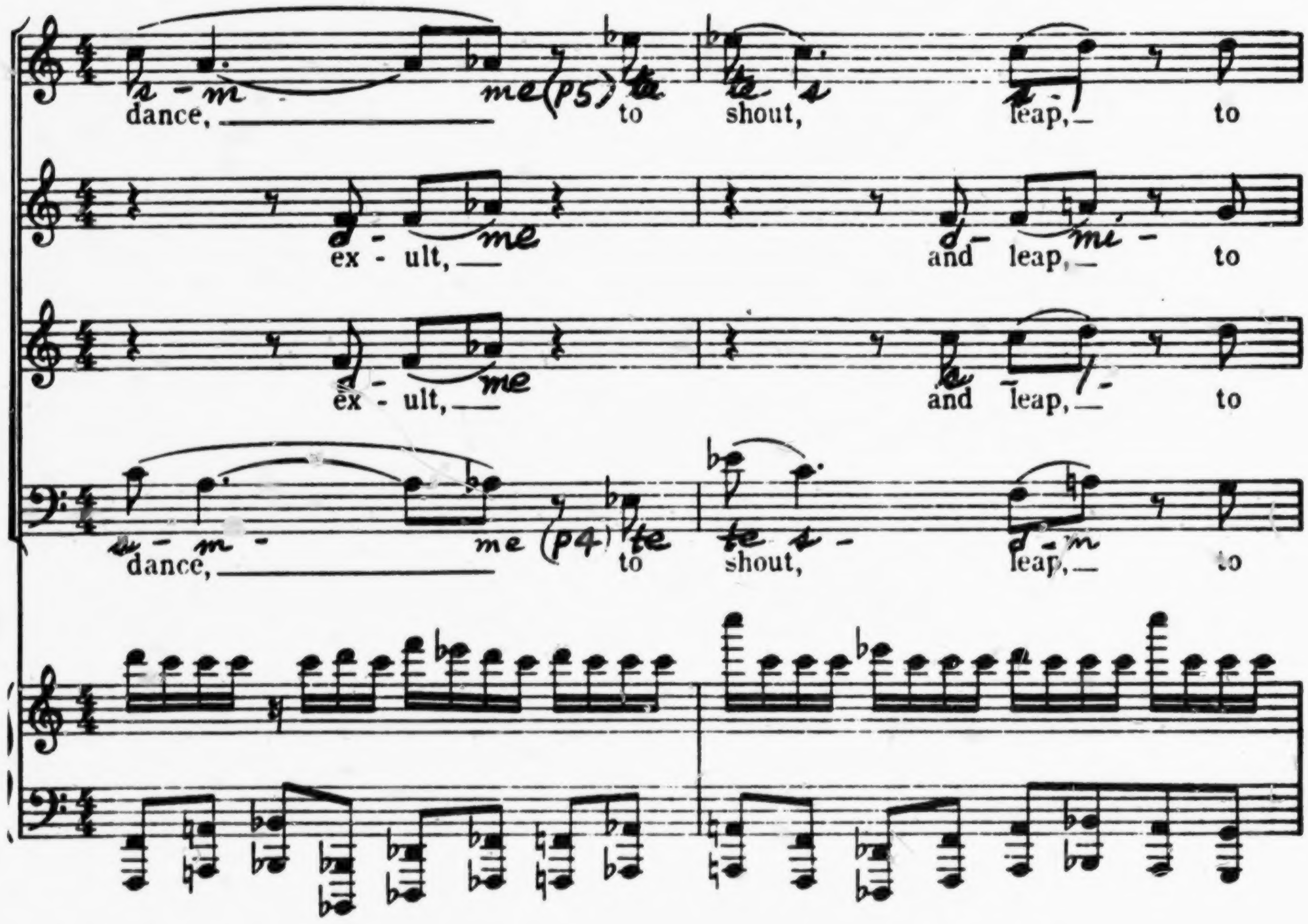

Calm
♪=♩ preceding
90 D-Maj. Tonality
F♯ Quart M3
min 2
p
pro-phet-ic joys,
We sing pro-phet-ic joys, we
We sing pro-phet-ic joys, we
pro-phet-ic joys,
mf
p
D-Maj-7
B-Maj 9 w/o 7
f♯m Add4
DMaj-7 w/o 3
G Maj-7 w/o 5
D-Maj-7
we sing pro-phet-ic joys of lofty-y i-de-als, lofty-y i-de-als.
sing, we sing pro-phet-ic joys of lofty-y i-de-als, lofty-y i-de-als.
sing, we sing pro-phet-ic joys of lofty-y i-de-als, lofty-y i-de-als.
we sing pro-phet-ic joys of lofty-y i-de-als, lofty-y i-de-als.
pp


95
a u-ni-ver-sal love a-wak-ing in the hearts of men.
a u-ni-ver-sal love a-wak-ing in the hearts of men.
We sing a u-ni-ver-sal love a-wak-ing in the hearts of men.
We sing a u-ni-ver-sal love a-wak-ing in the hearts of men.
Soprano Solo
We sing pro-phet-ic joys we sing of loft-y i-de-als
E Quart
B Quart
f# min. Add 4
hum
pp sempre
hum
pp sempre
hum
pp sempre
hum

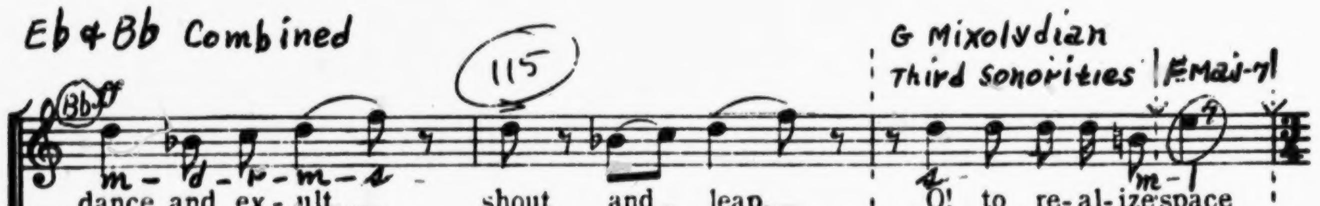

100
f#minmin9 -11
g#min Add 4
Bmm7
C# - mm-7
GMM9-7
we sing of love, of love a-wak-ing in hearts of men, of men
m fi m fi m d r d
r m di m di do t l l
l t l t l s fi fa
fa s l s l l l
a u-ni-ver-sal love.
Whole-tone scales (E+B)-Notes Circled
105
f
O! to have life a
O! to have life, life a
O! to have life a
O! to have life, life a
pp
f

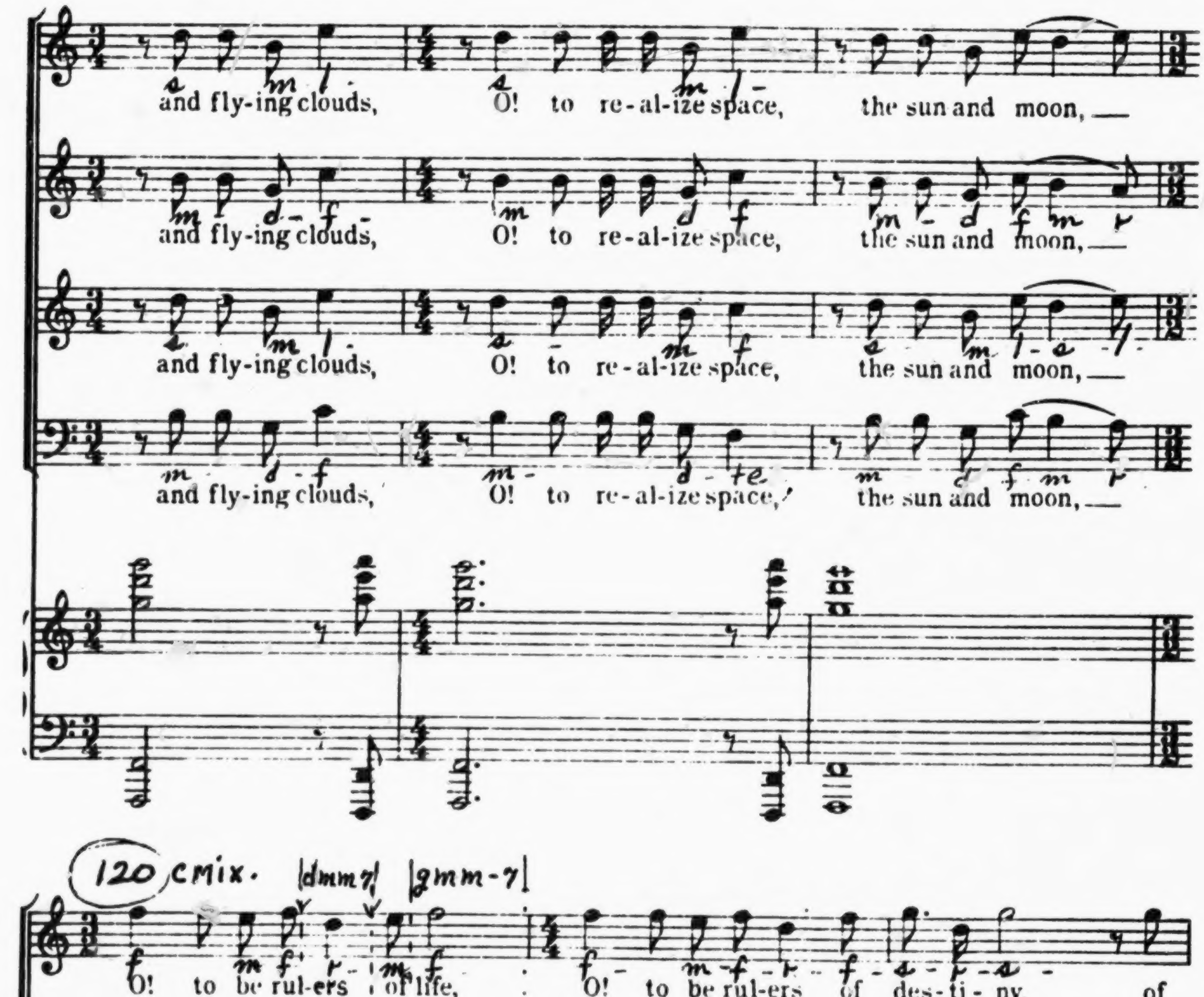

Whole tone scale (Notes circled) Perf.4+5 Sonorities
C# mM9
accelerate
to
Twice as fast
ff
po-em of new joys, a po-em of new joys, to shout! shout!
po-em of new joys, a po-em of new joys, to shout! shout! shout!
po-em of new joys, a po-em of new joys, to shout! shout!
po-em of new joys, a po-em of new joys, to shout! shout! shout!
accelerate
to
Twice as fast
8
ff
ff
Perf 4+5 Sonorities
110
mf
shout! shout! shout! to
shout! shout! shout! (m3) shout!
shout! shout! (m3) shout!
shout! shout! shout! (m3) shout! to
8
f

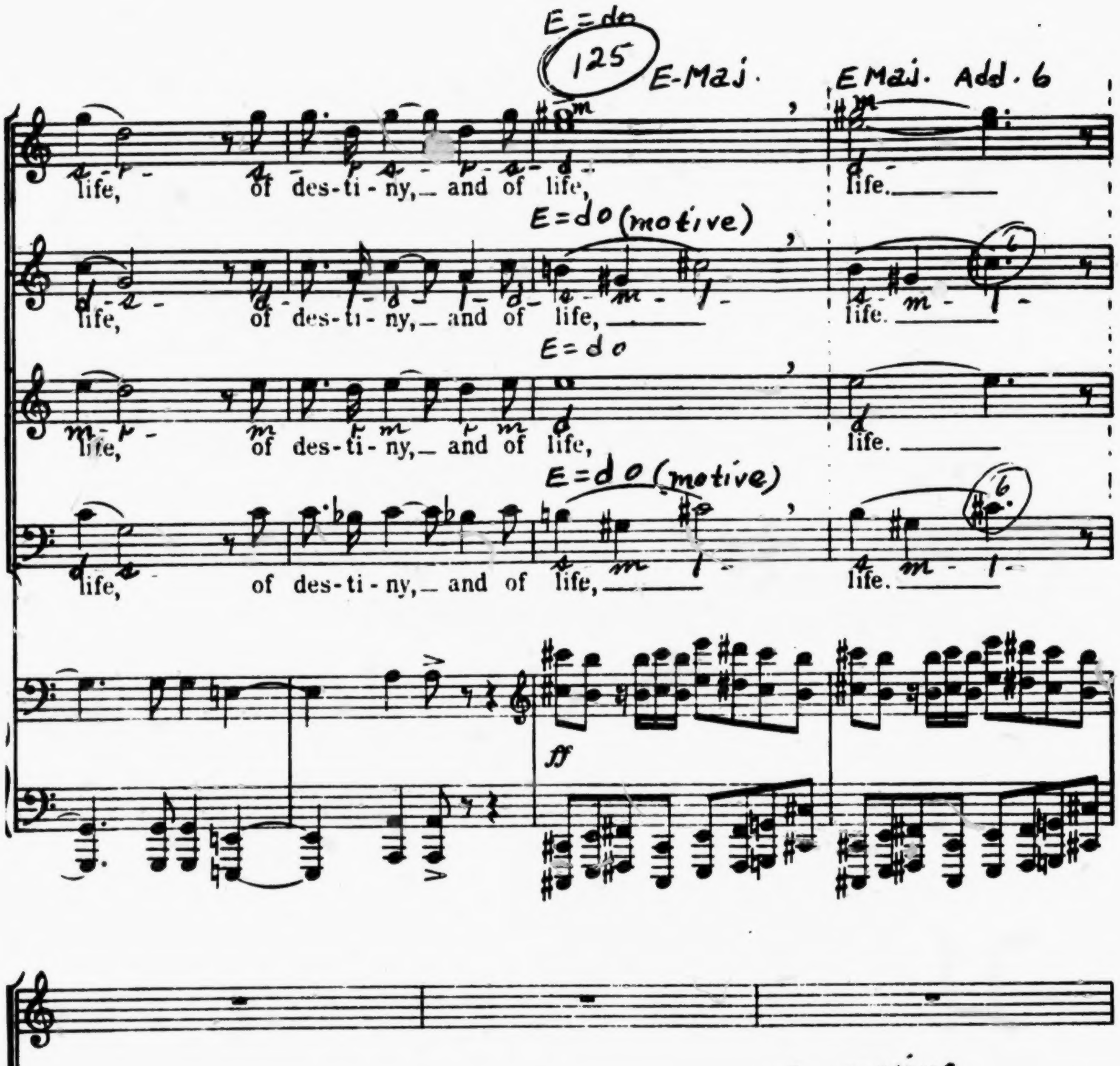
F-Maj-min. Tonality (Mixolydian influence)

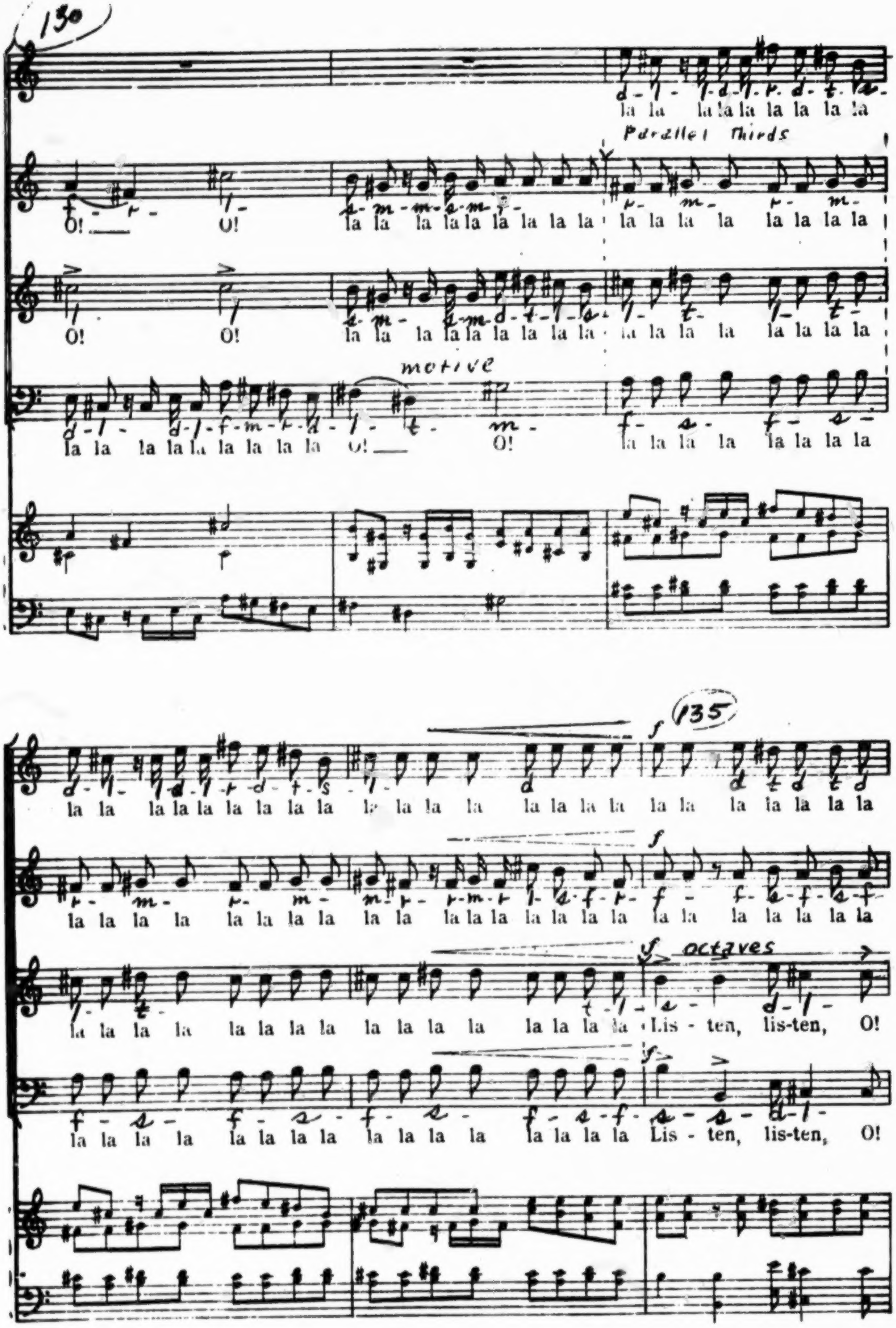

dance, to shout, leap, to
ex-ult, and leap, to
ex-ult, and leap, to
dance, to shout, leap, to
me (P5) te
me (P4) te

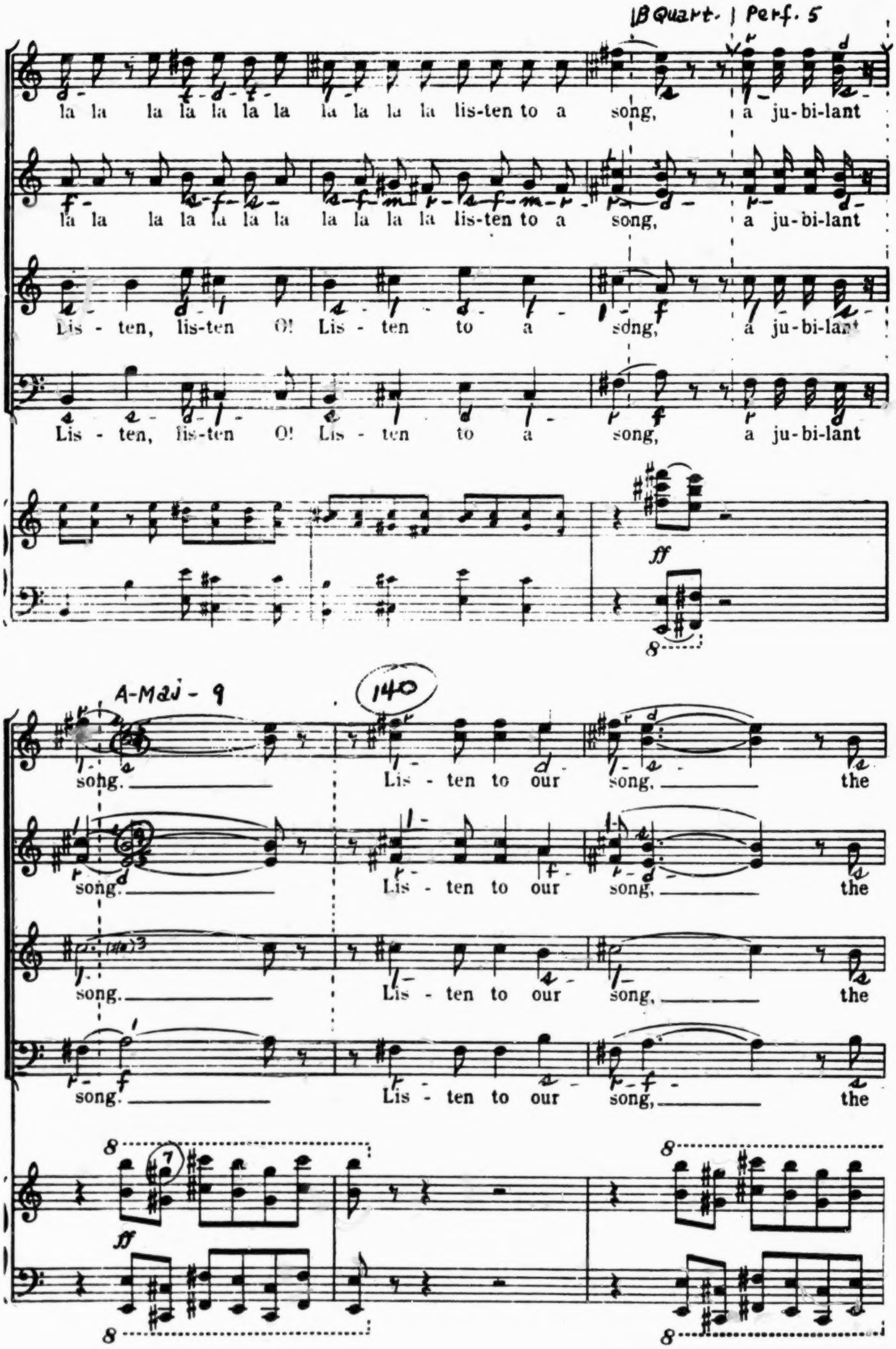
Eb & Bb Combined


115
G Mixolydian
Third Sonorities
F Maj-7
Bb
Eb
Bb
Eb
ff
dance and ex-ult, shout and leap. O! to re-al-ize space
dance and ex-ult, shout and leap. O! to re-al-ize space
dance and ex-ult, shout and leap. O! to re-al-ize space
dance and ex-ult, shout and leap. O! to re-al-ize space


and fly-ing clouds, O! to re-al-ize space, the sun and moon,
120 CMix. dmm7 gmm-7
O! to be rul-ers of life, O! to be rul-ers of des-ti-ny, of

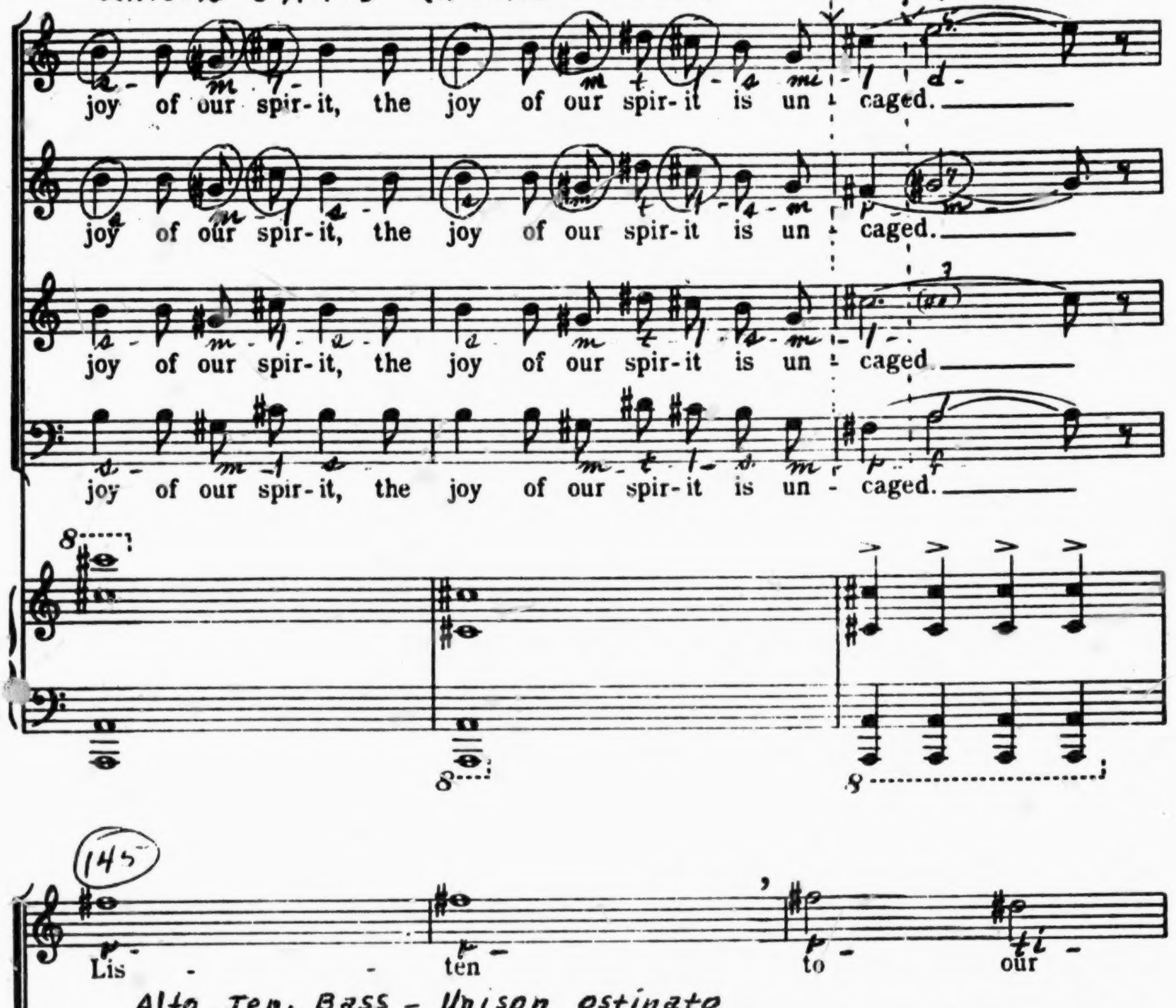

E=do
125
E-Maj.
E Maj. Add. 6
life, of des-ti-ny, and of life, life.
E=do (motive)
life, of des-ti-ny, and of life, life.
E=do
life, of des-ti-ny, and of life, life.
E=do (motive)
life, of des-ti-ny, and of life, life.
ff
mf
motive
O! O!
mf
motive
O! O! O! O!
mf
la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la


130
Parallel Thirds
motive
la la la la la la la la la
O! O!
la la la la la la la la la
135
octaves
Lis-ten, lis-ten, O!
f

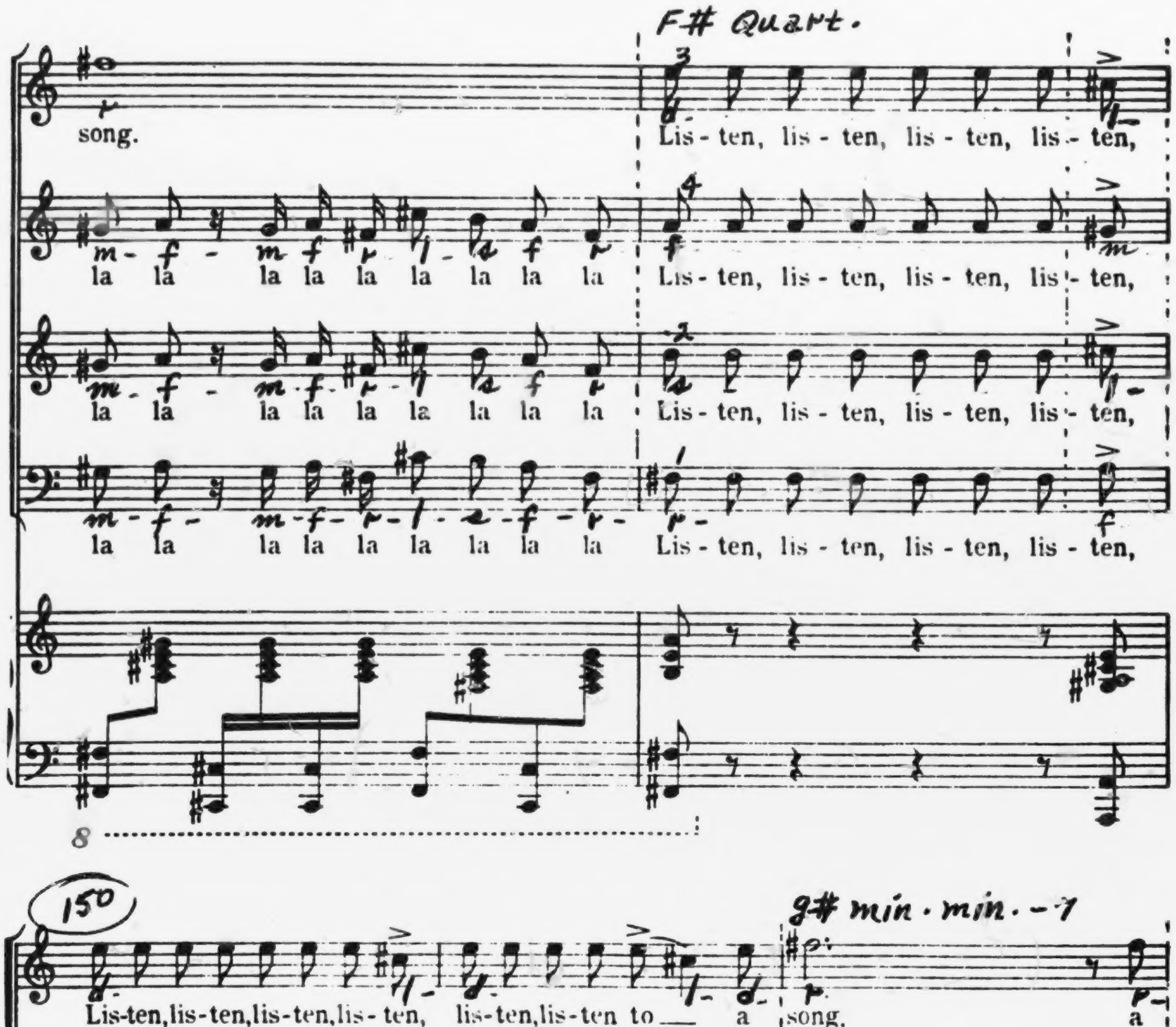

B Quart. | Perf. 5
la la la la la la la la la la la lis-ten to a song, a ju-bi-lant
la la la la la la la la la la la lis-ten to a song, a ju-bi-lant
Lis - ten, lis-ten O! Lis - ten to a song, a ju-bi-lant
Lis - ten, lis-ten O! Lis - ten to a song, a ju-bi-lant
ff
8
A-Maj-9
140
song. Lis - ten to our song, the
song. Lis - ten to our song, the
song. Lis - ten to our song, the
song. Lis - ten to our song, the
ff
7
8

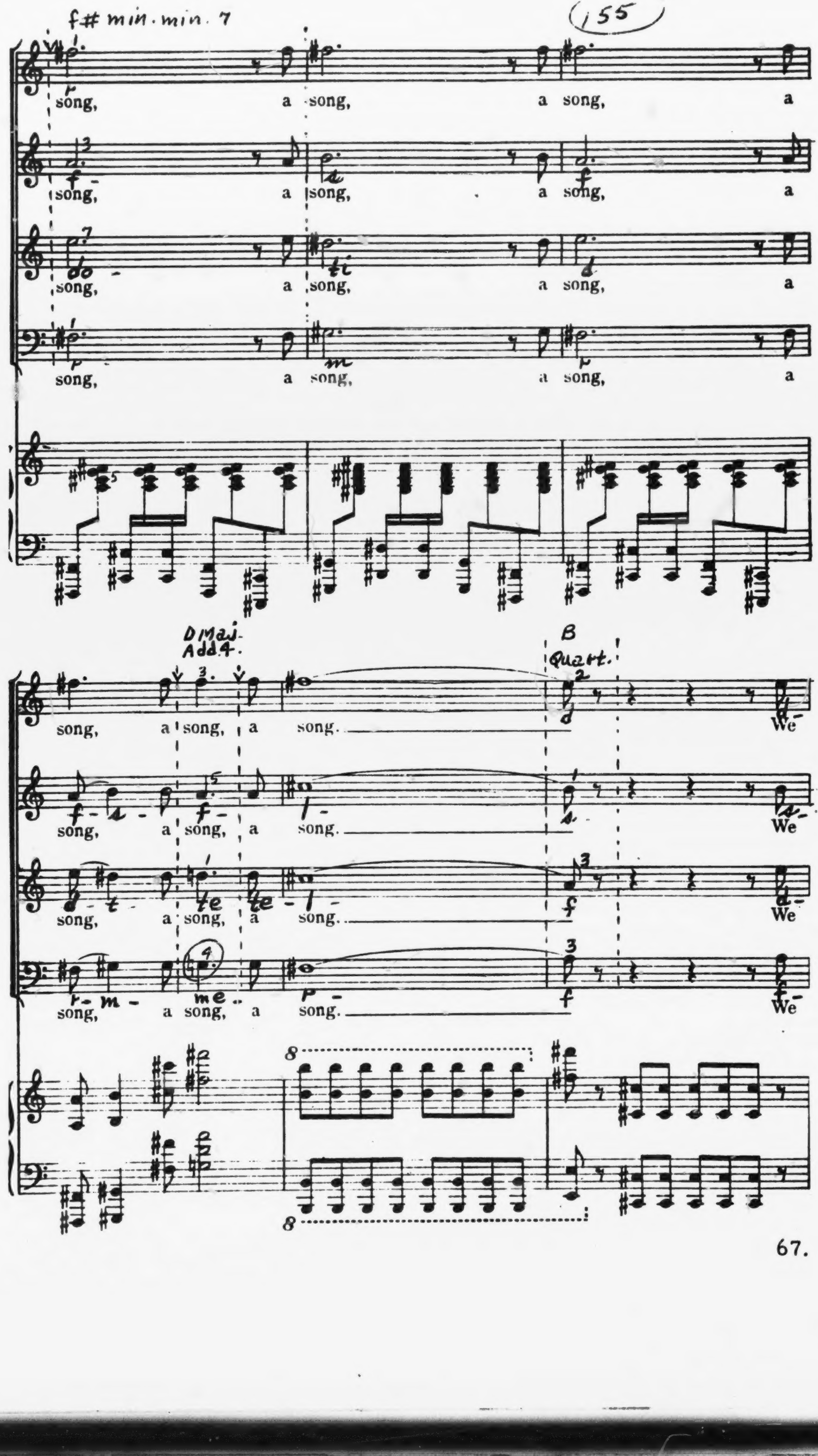
Unison S.A.T.B (motive circled)

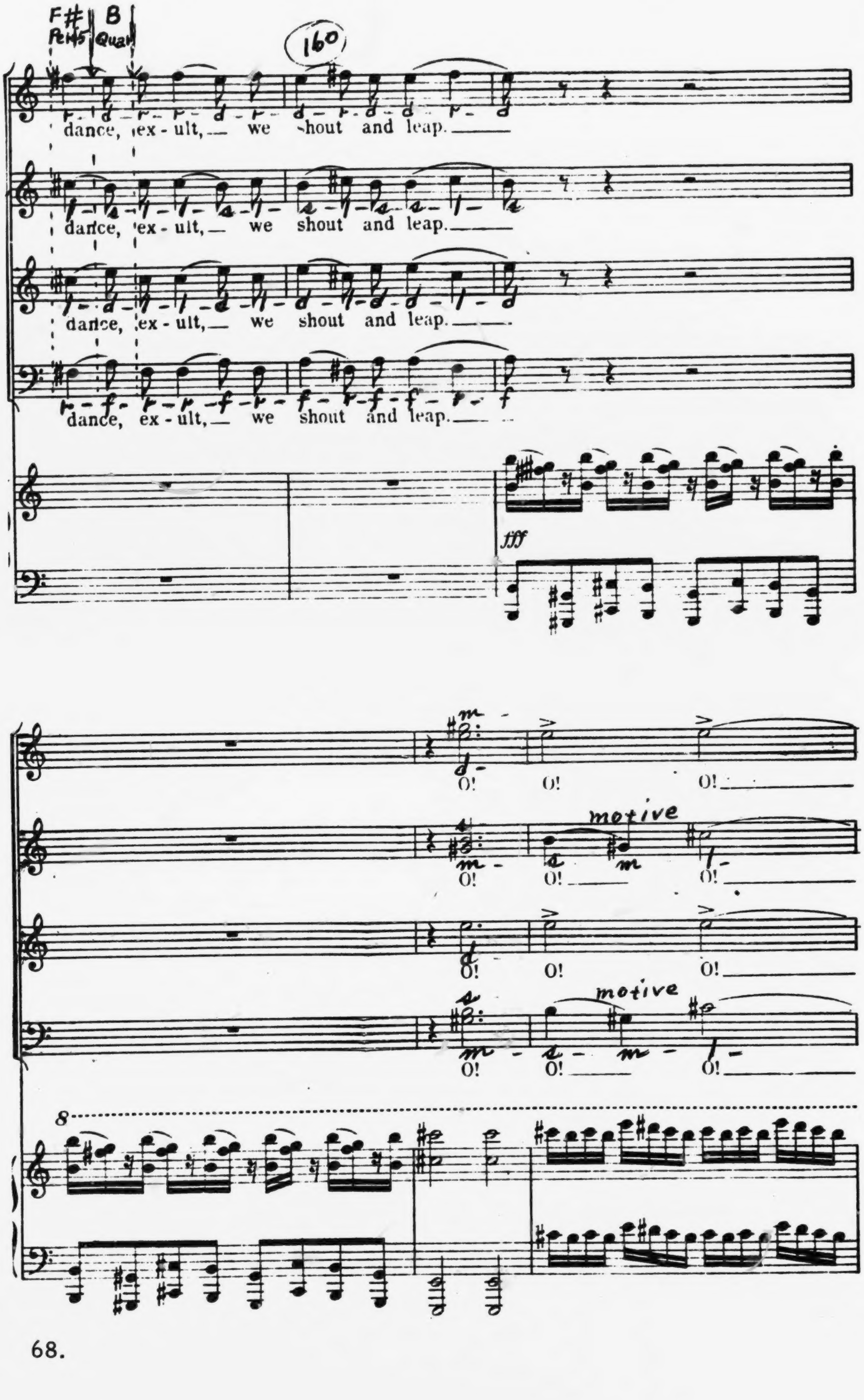
P5 | A Maj.Maj.-7


joy of our spir-it, the joy of our spir-it is un-caged.
joy of our spir-it, the joy of our spir-it is un-caged.
joy of our spir-it, the joy of our spir-it is un-caged.
joy of our spir-it, the joy of our spir-it is un-caged.
145
Lis-ten to our
la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la
la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la
la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la la

Alto, Ten., Bass – Unison ostinato


F# Quart.
song.
Lis - ten, lis - ten, lis - ten, lis - ten,
la la la la la la la la la
Lis - ten, lis - ten, lis - ten, lis - ten,
la la la la la la la la la
Lis - ten, lis - ten, lis - ten, lis - ten,
la la la la la la la la la
Lis - ten, lis - ten, lis - ten, lis - ten,
8
150
g# min · min. - 7
Lis-ten, lis-ten, lis-ten, lis - ten, lis-ten, lis-ten to a song, a
Lis-ten, lis-ten, lis-ten, lis - ten, lis-ten, lis-ten to a song, a
Lis-ten, lis-ten, lis-ten, lis - ten, lis-ten, lis-ten to a song, a
Lis-ten, lis-ten, lis-ten, lis - ten, lis-ten, lis-ten to a song, a


f# min. min. 7
(155)
song, a song, a song, a
song, a song, a song, a
song, a song, a song, a
song, a song, a song, a
r
f
la
f
do
ti
d
r
m
r
D Maj. Add 4.
B Quart.
song, a song, a song.
song, a song, a song.
song, a song, a song.
song, a song, a song.
We
We
We
We
f la f l s s
d t te te l f d
r m me r f f
8
8


F# Perf5
B Quart
160
dance, ex-ult, we shout and leap.
dance, ex-ult, we shout and leap.
dance, ex-ult, we shout and leap.
dance, ex-ult, we shout and leap.
fff
O! O! O!
motive
O! O! O!
O! O! O!
motive
O! O! O!
8

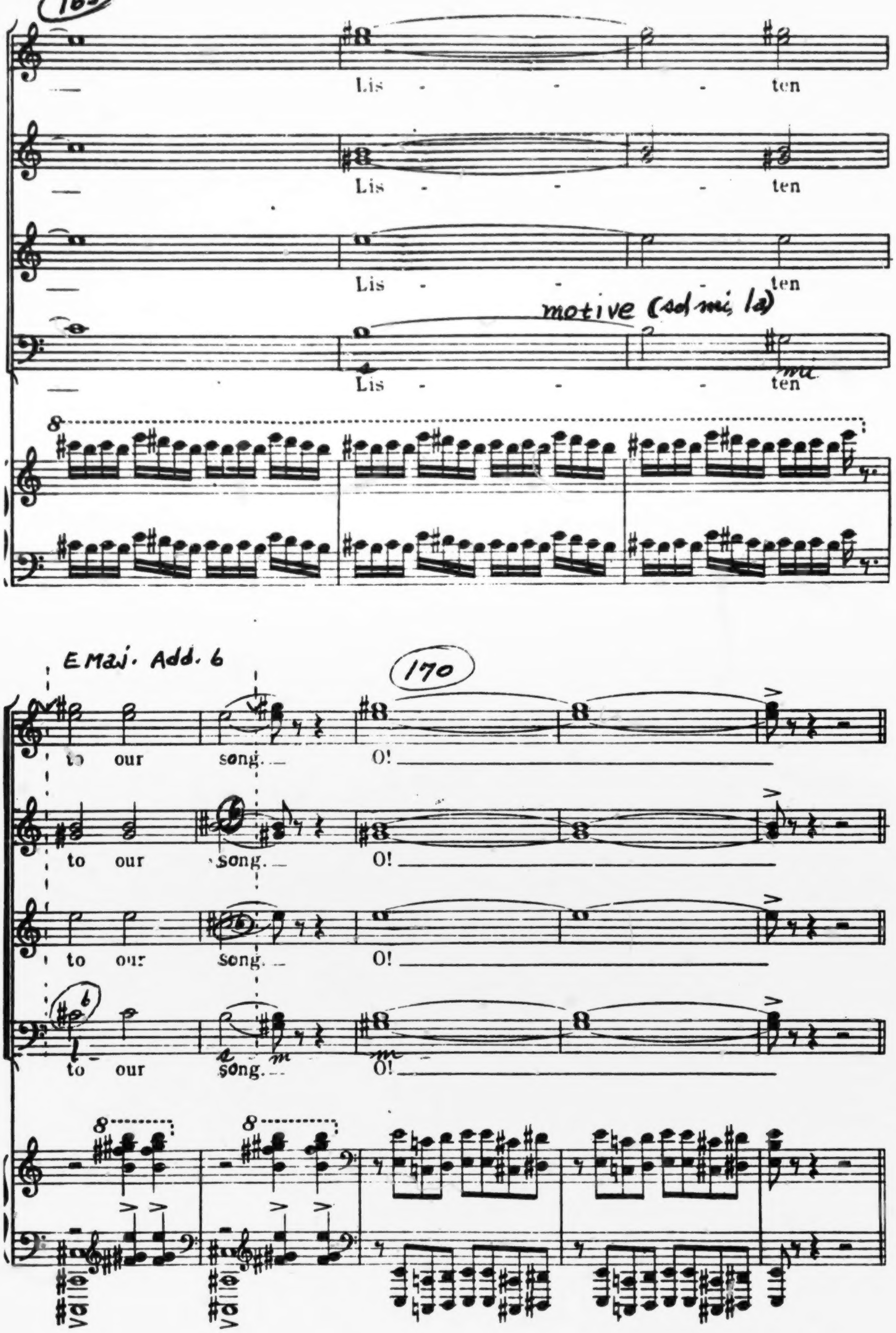

165
Lis - - - ten
Lis - - - ten
Lis - - - ten
motive (sol mi, la)
Lis - - - ten
mi
8
EMaj. Add. 6
170
to our song. O!
to our song. O!
to our song. O!
to our song. O!
6
la
mi
mi
8
V
I

TABLE V

JUBILANT SONG--FORM

Section	Measures	Texture	Tonality
Introduction	1-37	Piano and chorus state motive.	E and related Mixolydian B
I	38-87	Alternation of homophonic and contrapuntal textures.	
	14-43	Homophonic	
	44-50	Canon in octaves.	
	53-61	Homophonic.	
	62-66	Imitative in octaves, thirds, and oontrary motion.	
	67-71	Homophonic.	
	73-78	Canon in octaves.	C-F
	79-85	Homophonic.	F-B
II	88-104	Contrasting slower section of homophonic and contrapuntal design, includes soprano solo.	
	88-90	Piano interlude.	E
	91-102	Homophonic	D
	103-105	Canonic in fifths.	D
Transition	105-109	Transition, homophonic, accellerando.	Polytonal E-B, F
III	110-174	Modified recapitulation of Section I.	
	111-113	Imitative with inner voices moving in contrary motion.	C Mixolydian

TABLE V Continued

Section	Measures	Texture	Tonality
III (cont.)	114-126	Homophonic, successive thirds, contrary motion	Polytonal--D Mixolydian and F Mixolydian changing to B
	127-134	Canonic statements above ostinato statements in succession by bass, tenor, soprano, and alto.	Polytonal--B, A, and E Mixolydian
	138-144	Homophonic.	B and E
	145-148	Octave statements of ostinato in three lower voices below soprano statement of motive in elongated rhythm.	F#
	149-170	Homophonic building to final climax.	F#-E

TABLE VI

JUBILANT SONG--RHYTHMIC FEATURES AND RELATED SKILLS

Feature	Measures	Related Skill (A detail of these is given in Table XVI, p. 100).
1. Multi-meters:		1. Perform tonal and rhythmic patterns involving frequent changes of meter.
5/8	14-36	
4/4, 5/4, 3/2	37-50	
3/4, 4/4	51-53	
3/2, 4/4	62-63	
5/4, 4/4, 3/4, 6/4, 3/2	89-121	
2. Syncopated rhythms after:		2. Perform syncopated rhythms with notes changing after first, second, third, and fourth beats of the measures.
beat one	66, 82, 116, 119, 149-151	
beat two	53, 55	
beat three	38, 58-60, 67, 80-81, 135, 142	
beat four	149-150	
3. Attacks occurring after:		3. Perform notes of entry after the first, second, third, and fourth beats of measures.
beat one	45, 46, 92, 105, 116-119, 140	
beat two	91, 95, 112, 127-134, 147-148	
beat three	44, 95, 104, 111-112, 138	
beat four	40, 45, 48, 90, 91, 112, 122, 141	

TABLE VII

JUBILANT SONG--MELODIC-PITCH FEATURES AND RELATED SKILLS

Feature	Measures	Related Skill (A detail of these skills is given in Table XVII, p. 104).
1. Three-note motive stated in unison and octaves.	14-21, 48-56, 75-78, 104-105, 135-138	1. Perform descending minor third, ascending perfect fourth combinations in unison and octaves.
2. Motive stated in perfect fifths.	27-36	2. Perform motive in perfect fifth relation.
3. Motive stated in vertical note arrangement.	44-50, 63-66, 75-78, 104-105	3. Perform motive or fragment in imitation.
4. Motive stated in vertical note arrangement.	57-60, 90-96, 114-115 154-156	4. Perform motive as part of harmonic coloration.
5. Motive stated with altered note arrangement.	53-56	5. Perform altered interval arrangement of motive.
6. Motive stated in hocket.	64-66, 112-113	6. Perform motive in hocket style.
7. Motive statement with alteration between major and minor thirds.	112-113	7. Perform motive with alterations between minor and major thirds.
8. Linear deviations from motive used as part of harmonic coloristic tones.	38-44, 57-60, 66-70, 91-110, 131-141, 149-160	8. Perform melodic intervals designed to add harmonic coloration to the motive.

TABLE VIII

JUBILANT SONG--HARMONIC FEATURES AND RELATED SKILLS

Feature	Measures	Related Skill (A detail of these skills is given in Table XVIII, p. 109).
1. Quartal chords	38, 60 (and second, 61, 91, 97-99, 108, 138, 140, 149-151	1. Perform chords constructed on perfect fourth intervals. a. Sing in arpeggiated style. b. Sing any pitch of quartal chords built on a given pitch.
2. Chords with added sixth, or added sixth considered as root of minor minor seventh chord.	38, 39, 74, 92, 96, 100, 116, 120, 125-126, 168	2. Perform chords with added sixth intervals. a. Sing in arpeggiated style. b. Sing any pitch of sixth chords built on a given pitch.
3. Chords with added seconds.	39, 67 (and fourth), 69, 139, 141	3. Perform chords with added second intervals. a. Sing in arpeggiated style. b. Sing any pitch of chords of added seconds built on a given pitch.
4. Chords with added fourths.	42, 59, 68, 92, 93, 99, 101 (in solo), 156	4. Perform chords with added fourth intervals. a. Sing in arpeggiated style. b. Sing any pitch of chords with added fourths built on a given pitch.
5. Minor minor seventh chords (may also be considered as added sixth chord with the third used as the root).	38 (without fifth), 39, 42, 43, 96, 152, 153	5. Perform minor chords with minor sevenths added. a. Sing in arpeggiated style. b. Sing any pitch of minor seventh chords built on a given pitch.
6. Major major seventh chord.	42, 92, 93, 94, 96, 114	6. Perform major chords with major sevenths added. a. Sing in arpeggiated style. b. Sing any pitch of major seventh chords built on a given pitch.

"The Last Invocation"

from Carols of Death

by William Schuman

Text by Walt Whitman

Copyright, 1959, by Merion Music, Inc.

Copyright permission to reproduce score in this
study was not granted in time to be included.

TABLE IX

"THE LAST INVOCATION"--FORM

Section	Measures	Texture (homophonic throughout)	Tonality
A	1-5	Homophonic, two-part in octaves, contrary motion.	F
	4-5	Four-part texture.	D F
	6-20	Alternation of two and four-part texture	
	6-9	Two-part, homophonic, ascending movement in soprano and tenor against sustained tones in alto and bass.	B♭
	10-13	Mirror progressions, four-part homophonic, contrary motion	E
	14-18	Two-part texture, first in women's, then in men's voices in contrary motion.	F#
	19-20	Four-part, ascending motion in soprano and tenor against sustained tones in alto and bass.	C#
A^1	21-31	Modified recapitulation of A	
	21	Compare meas. 3.	D
	22-26	Compare meas. 4-5.	D
	27-28	Compare meas. 2-3.	D
	29-31	Climax, compare meas. 1-2, two-part, ends on four-part texture.	A F#

TABLE X

"THE LAST INVOCATION"--RHYTHMIC FEATURES AND RELATED SKILLS

Feature	Measures	Related Skill (A detail of these skills is given in Table XIX, pp. 116).
1. Multi-meters:		1. Perform tonal and rhythmic patterns based on constantly changing meters of 4/2, 3/2, 2/2, 2/4.
4/2, 3/2	1-5	
4/2, 2/2	6-11	
3/2, 2/2, 4/2	12-15	
4/2, 2/4	16-18	
4/2, 2/4, 3/2, 2/4	22-25	
3/2, 4/2	26-31	
2. Rhythms involving subdivisions of the pulse ( ) into equal parts of:		2. Perform tonal and rhythmic patterns based on beat subdivisions of four, six, three, and eight equal parts.
four	1-3, 7-9, 10, 13, 17-19 21-22, 24, 26-28	
six	6, 7, 8, 15	
eight	17	
3. Syncopation and attacks occurring after the beat.	6, 8, 10, 12, 14, 16, 19, 26	3. Perform rhythms involving syncopation and attacks on the after-beat.

TABLE XI

"THE LAST INVOCATION"--MELODIC-PITCH FEATURES AND RELATED SKILLS

Feature	Measures	Related Skill (A detail of these skills is given in Table XX, p. 120).
1. Passages derived from the Phrygian scale:		1. Perform linear progressions based on the Phrygian scale.
Soprano	1-5, 19-20, 21-25, 29-31	
Tenor	16-20, 29-31	
Alto	29-31	
Bass	16-18	
2. Passages derived from the chromatic scale:		2. Perform linear patterns based on the chromatic scale.
Bass	1-5	
Alto	14-15, 27-38	
3. Harmonic minor scale:		3. Perform passages based on the harmonic minor scale.
Tenor and bass	10-11	
4. Synthetic scale:		4. Perform passages based on the synthetic scales.
Soprano	12-13	
5. Dorian scale:		5. Perform passages based on the Dorian scale.
Tenor	21-23	
Tenor and soprano	6-7	

TABLE XI Continued

Feature	Measures	Related Skill (A detail of these skills is given in Table XX, p. 120).
6. Entries after mixed durations of rest:		6. Perform entries after mixed durations of rest.
Soprano and alto	19, 22	
Tenor and bass	16	
7. Enharmonic intervals:		7. Perform enharmonic intervals involving diminished second, perfect prime, augmented second, minor third, diminished third, major second, and doubly diminished prime.
Dim. 2 = perf. prime		
Tenor	12	
Alto	15	
Aug. 2 = min. 3		
Soprano	23-24	
Dim. 3 = maj. 2		
Bass	20-21	
Doubly dim. prime = maj. 2		
Tenor	20-21	

TABLE XII

"THE LAST INVOCATION"--HARMONIC FEATURES AND RELATED SKILLS

Feature	Measures	Related Skill (A detail of these skills is given in Table XXI, p. 126).
1. Unique two-part progressions of vertical placement:		1. Perform unique two-part progression in arpeggiated style and in block style.
Four voices and men m2 m3 p4 p5	2-3	
Four voices d5 m6 p5 p4 m3	7	
Four voices m3 p4 d5 m7 M6 M9	8-9	
Soprano and alto m2 m3 M3 p4 p5	14-15	
Tenor and bass m2 m3 p4 m6 p5 p4 M2 p4	16-18	
2. Unique four-part chords: Added second and tritone	4, 13, 22, 24, 31	2. Perform unique four-part chords of added seconds, tritones, sevenths, and quartal structures.
Added second	4, 11, 12, 13, 22, 31	
Added sixth	4, 11, 13, 22	a. In arpeggiated style.
Major seventh	22, 24, 26	b. Any tone of a chord from a given pitch.
Minor major seventh	5, 23, 25, 26	
Minor minor seventh	12, 24	
Quartal	10, 11, 12	

SKILL REQUIREMENTS WITH RELATED LEARNING ACTIVITIES

Skills derived from the tables in the preceding section are used as a basis for suggested teaching procedures found in the following tables. Plates showing rhythmic patterns follow each rhythmic procedure table as a distinct phase of the learning experience. Directions for the use of these patterns are included in the rhythmic procedure tables. Plates containing melody-pitch and harmonic pattern for drill follow melody-pitch and harmonic tables, and are intended to be used for vocalization and drill before opening the musical score.

An overhead projector is especially useful for the contextual whole-part-whole method of teaching pitches and rhythms. Transparencies may be prepared easily and marked as illustrated by the scores in the previous section, When comparatively few problems are indicated on a certain page of music, it is recommended that the same overlay be used with different colors corresponding to melodic and harmonic features, e.g., rhythm--red, harmony--blue, and melody--yellow. The purpose behind these overlays is to help the singer focus his attention upon one feature at a time. Two overlays are recommended when dealing with a relatively large number of melodic and harmonic concepts on the same page of music. (See sample transparency and overlays in Appendix D.)

A final word: the discovery method of teaching, as earlier cited, is realized through flexible use of procedures. The suggested order of learning activities for each composition, following the tables and plates in the pages immediately ahead, is presented in a more systematic and consistent order than the implementation of a discovery approach might normally indicate. This was necessitated by the projected use in a controlled experiment by the researchers to determine the relative effectiveness of the proposed teaching procedures over the rote-drill approach. However, caution is suggested rigid adherance to the suggested order of learning activities, which in itself mitigate against an atmosphere of inquiry and discovery. Ideally the order is determined rather spontaneously in the rehearsal as the group becomes aware of each specific problem and is ready to turn attention to its analysis.

"ANTHONY O'DALY"

from Reincarnations

by Samuel Barber

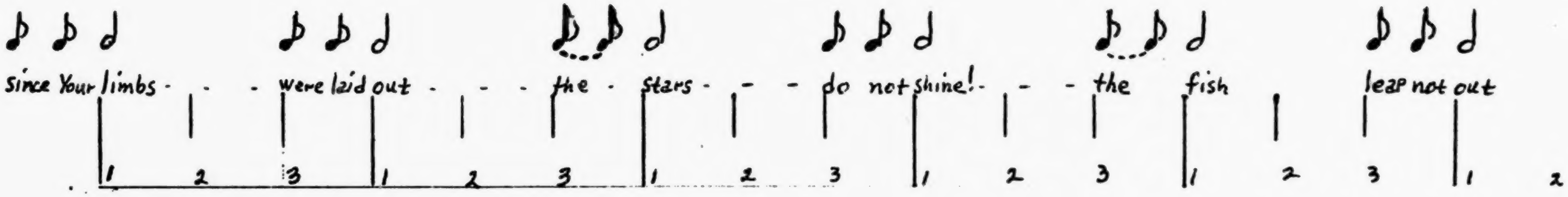
TABLE XIII

"ANTHONY O'DALY"--RHYTHMIC SKILL AND RELATED LEARNING PROCEDURES

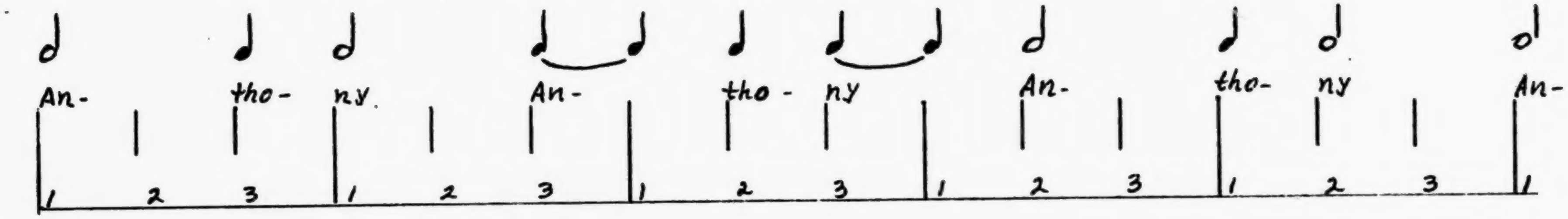
Skill	Measures	Procedure
1. Perform poly-accented rhythms throughout.	7, 19, 41, 64	1. Poly-accented rhythms. a. Using an overhead projector flash rhythm pattern No. 1 (see Plate II, p. 86). Chorus reads and chants against conducting with right hand. b. Flash rhythm pattern No. 2. Repeat above procedure c. Women do "a" and men do "b." Men begin chant pattern as introduction. d. Flash rhythm pattern No. e. Manually place bar line accents in as shown in dotted lines, first in tenor. All read. Repeat in alto, All read together; men on tenor begin on beat three and women on alto begin after men on beat one. e. Repeat " d" over drone ostinato of bass. f. Flash rhythm pattern No. 4. Each part takes respective rhythm and chants parts while conducting. g. Open the score and read words rhythmically while conducting. Observe proper diction, tone inflection, phrasing, and style.

TABLE XIII continued

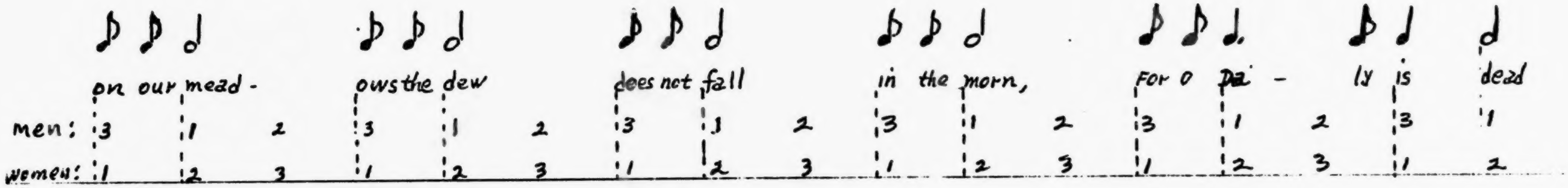
Skill	Measures	Procedure
2. Perform passages involving rhythmic overlapping.	Common throughout	2. Rhythmic overlapping. a. Choir chants rhythms and stresses the sustained note, which is carried over the bar line. b. Compare the effect created by diminishing the sound of tied notes. Which method produces more intensity of feeling and more sustaining quality? c. Sing in context, applying the same vocal stress to the singing voice as with the speaking voice.
3. Perform syncopated patterns.	76, 78, 80, 82	3. Syncopated patterns. a. Flash meas. 74-80. Half of choir claps the main beat patterns, the other half claps the after beat, while chanting the words and tapping the pulse with the feet. b. Sing in context.


Since Your limbs - - - were laid out - - - the - stars - - - do not shine! - - - the fish leap not out
1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2

No. 1. Meas. 0-6

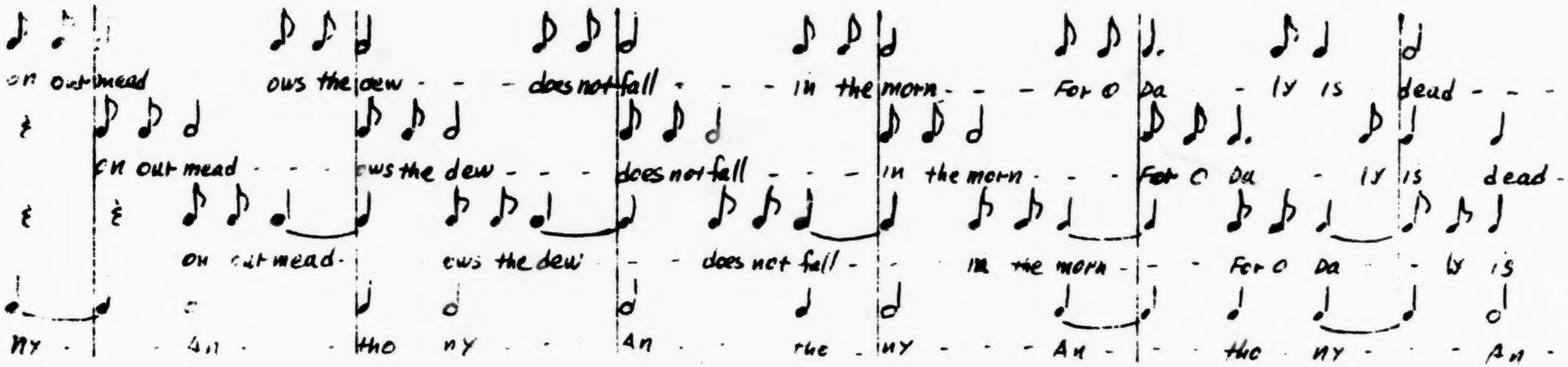

An- tho- ny An- tho - ny An- tho- ny An-
1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1

No. 2. Meas. 0-62

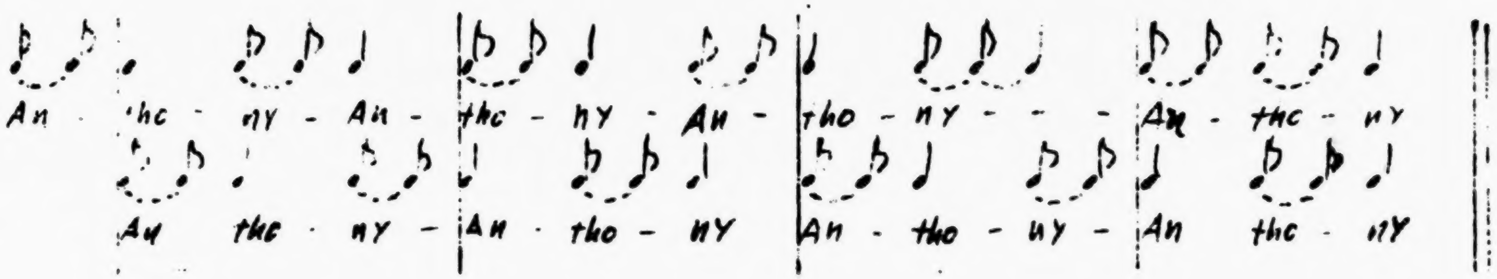

on our mead - ows the dew does not fall in the morn, For O Da - ly is dead
men: 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1
women: 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2

No. 3. Meas. 6-12

PLATE I. "ANTHONY O DALY"--RHYTHMIC PATTERNS FOR DRILL


on our mead ows the dew - - - does not fall - - - in the morn - - - For O Da - ly is dead - - -
on our mead - - - ows the dew - - - does not fall - - - in the morn - - - For O Da - ly is dead -
on our mead - ews the dew - - does not fall - - in the morn - - - For O Da - ly is
ny - - An - - tho ny - - An the - ny - - - An - - - tho ny - - - An -

No. 1 Meas. 18-23


An - tho - ny - An - tho - ny - An - tho - ny - - - An - tho - ny
An tho - ny - An - tho - ny An - tho - ny - An tho - ny

No. 2. Meas. 64-67

PLATE II. "ANTHONY O DALY"--RHYTHMIC PATTERNS FOR DRILL

TABLE XIV

"ANTHONY O DALY"--MELODIC-PITCH SKILLS AND RELATED LEARNING PROCEDURES

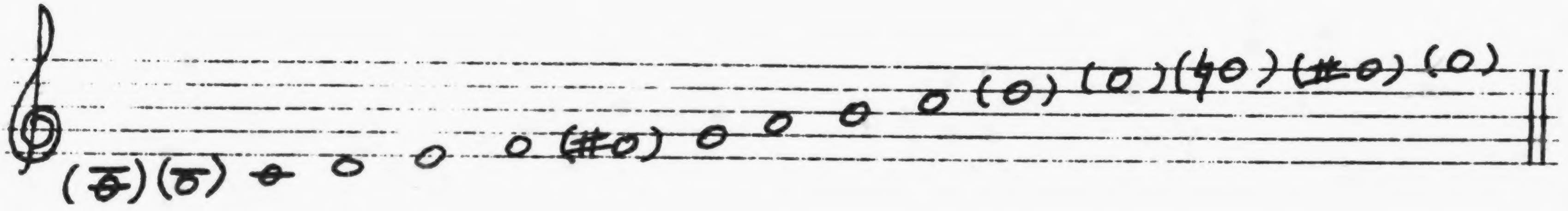
Skill	Measures	Procedure
1. Perform passages derived from natural minor and Phrygian scales.	0-12, 40-53	1. Flash E-natural minor scale, E Phrygian (with F in parenthesis), and G major scale relative to E minor (see Plate III, p. 90). a. All choir sings first line of "Joy to the World" in G major while pointing to the scale steps. b. All choir sings first line of "Joy to the World" in relative natural minor while pointing to the scale steps. c. All choir sings motive while pointing to appropriate scale steps. d. Transpose the motive to B and have choir sing while pointing out relative positions on E minor and Phrygian scale. e. Tenors and sopranos sing motive in E while alto and basses sing it simultaneously in B. f. Open scores and sing in context meas. 0-6. Check accuracy with piano.
2. Perform motive variations derived from natural minor and melodic minor scales.	13-18, 33-38, 54-59	2. Flash A melodic minor scale, natural minor, and relative E major (shown in black notes in parenthesis). a. All choir sings first line of "Joy to the World" in E major while pointing to scale steps. b. All choir sings first line of "Joy to the World" in A natural minor.

TABLE XIV Continued

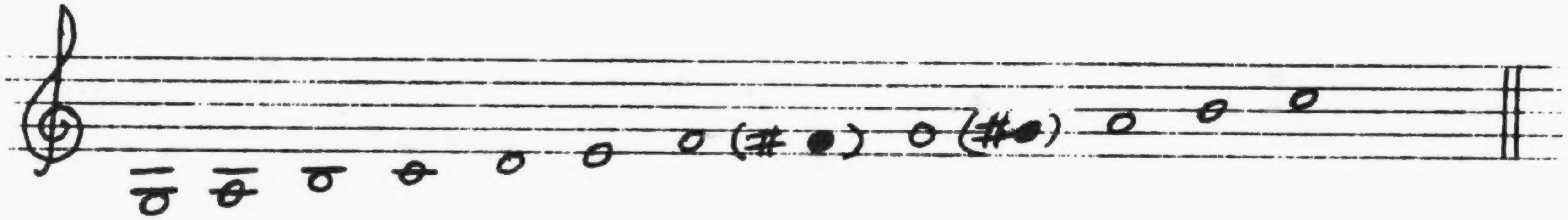
Skill	Measures	Procedure
2. (cont.)		2. (cont.) c. All choir sings first line of "Joy to the World" in A melodic minor scale. d. All choir sings motive variations based on A natural and melodic minor scale. e. Open scores and listen to all parts in context. f. Sing in context. Check accuracy with piano.
3. Perform motive fragment progressions based on Dorian scale referent (goal) tones.	25-32	3. Flash overlay showing goal tones circled. a. All choir sings referent tones of soprano and tenor simultaneously while pointing them out in overhead projector. b. Choir sings referent tones, piano plays embellishing tones in each part. c. Choir sings referent tones loudly, embellishing tones softly, while piano continues to play soprano and tenor. d. Open scores and sing in context. Check accuracy with piano. e. Similar procedures may be followed with alto part showing motive fragment progressions based on first inversion major chord referent tones.

TABLE XIV Continued

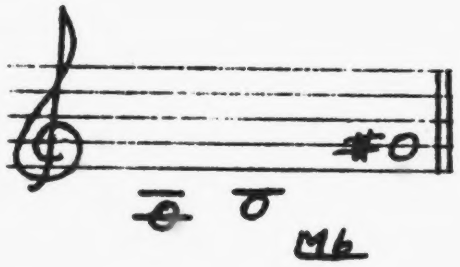
Skill	Measures	Procedure
4. Perform disjunct patterns.	12-13, 18-19, 25-26, 35-36, 53-54, 56-57, 63-64	4. Flash disjunct interval patterns in context using arrows to point out each interval, or drawing manually, if necessary. a. Drill each disjunct pattern with all choir singing each interval (maj. 6, min. 6, maj. 9, min. 9, aug. 4, dim. 5, maj. 3, min. 3). Check accuracy with piano. b. Rehearse each measure in which these disjunct intervals occur, identifying the interval being sung. c. Sing each measure in context, checking accuracy with piano.
5. Perform entries following mixed durations of rest.	1-7, 8-19, 75-82	5. Flash projections of the score with arrows drawn from the tone used as a referent to the pitch in question (can be drawn manually or pre-set). a. All voices sing the E referent tone in bass (meas. 6). b. All parts sing tenor note (octive higher than bass), alto note (meas. 7), perfect fifth higher than referent tone. c. Sing in context and check accuracy with piano. d. Follow similar procedures in meas. 18 (soprano), meas. 76 (alto), meas. 78 (tenor), and meas. 80 (bass). Sing in context and check accuracy with piano.



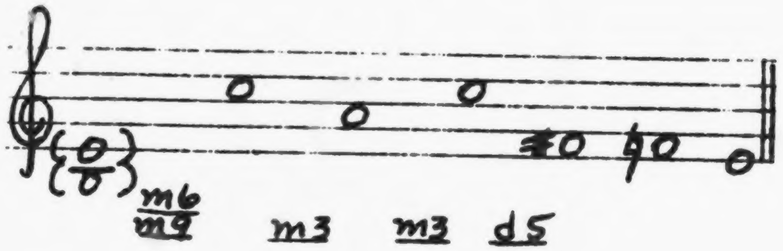
No. 1. Scale derivation for primary motive, C major, E Phrygian, E natural minor



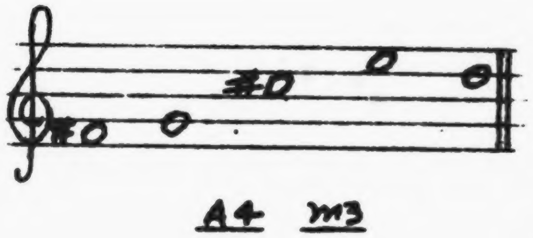
No. 2. Scale derivation for motive variation, meas. 13-18, 33-38, 54-59



No. 3. Alto, meas. 12-13

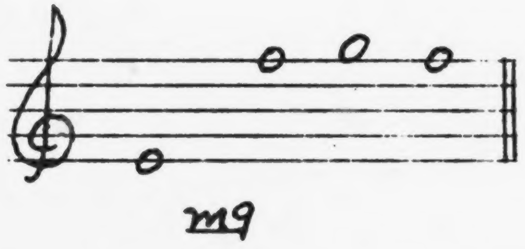


No. 4. Tenor and bass, meas. 12-18, 54-59

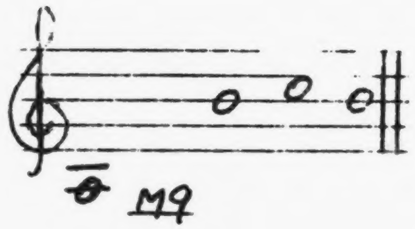


No. 5. Tenor, meas. 25-26

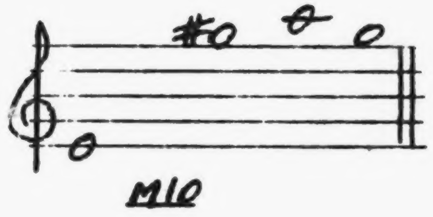
PLATE III. "ANTHONY O DALY"--MELODIC-PITCH PATTERNS FOR DRILL



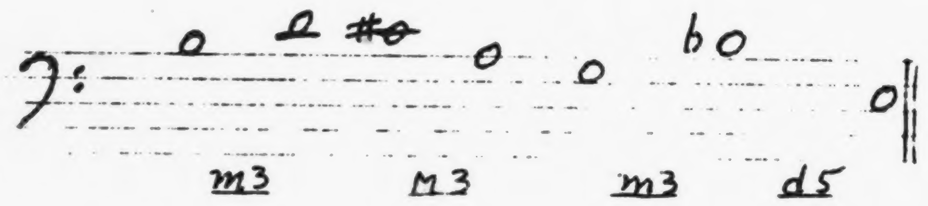
No. 1. Tenor, meas. 18-20



No. 2. Alto, meas. 18-20



No. 3. Tenor, meas. 53-54



No. 4. Meas. 61-64

PLATE IV. "ANTHONY O'DALY"--MELODIC-PITCH PATTERNS FOR DRILL

TABLE XV

"ANTHONY O DALY"--HARMONIC SKILLS AND RELATED LEARNING PROCEDURES

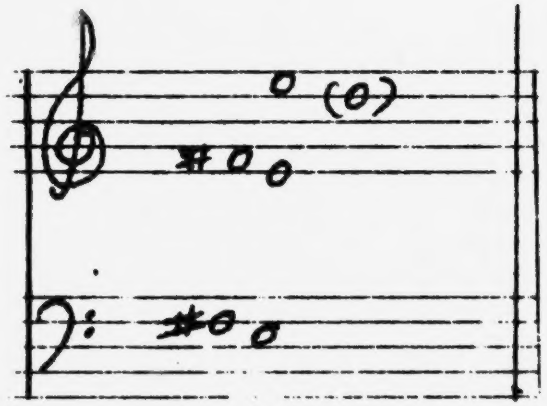
Skill	Measures	Procedure
1. Perform chords of augmented quality and sonorities of second relationships.	4, 9, 10, 13, 16, 20, 21, 24, 34, 36, 54	1. Flash augmented chords and second relationship overlays. a. Choir sings the notes of the chord melodically from the root upward while pointing to the notes Check accuracy with piano.
a. Sing in arpeggiated style.		b. Bass and alto hold the root, tenors sing the third, and soprano the fifth. Hold tones and check accuracy with piano.
b. Sing any pitch of augmented triads, second and ninth relationships from a given pitch.		c. Sing measures 13, 34, 54 in context and linger on the augmented sound. d. All choir sings melodically and harmonically sonorities which contain dissonant sounds and check accuracy with piano.
2. Perform abrupt transitions from unison E to the appropriate pitch of the C# minor chord to the appropriate pitch of the C major chord.	67 - 70	2. Flash the note E followed by a simple C# minor triad and a C major triad. a. All choir sings the notes of each chord melodically and harmonically while pointing to the separate notes. Check accuracy with piano. b. Sing E as the third of a minor chord. Find one and five in relation.

TABLE XV Continued

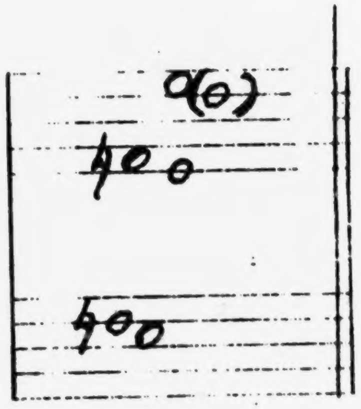
Skill	Measures	Procedure
2. Cont.		2. Cont.
		c. Basses sing 3 of the minor triad, tenors and sopranos 5, and altos 1.
		d. Sing E as the third of a major chord. Find one and five in relation.
		e. Sopranos sing the third E, basses and altos 1, and tenors 5 while pointing to the notes.
		f. Open scores and sing in context. Check chord changes for accuracy.
3. Perform descending series of diminished chords with each added tone entering a diminished fifth lower.	Closing section	3. Flash closing section of the song (meas. 74-86), diminished seventh chord.
		a. All choir sings consecutive minor thirds up and down the octave melodically and in unison.
a. Sing arpeggiated from any given pitch.		b. Basses sing root, tenors--third, altos--fifth, sopranos--seventh, and sustain the chord.
		c. Reverse procedure with soprano downward and check accuracy with piano.

TABLE XV Continued

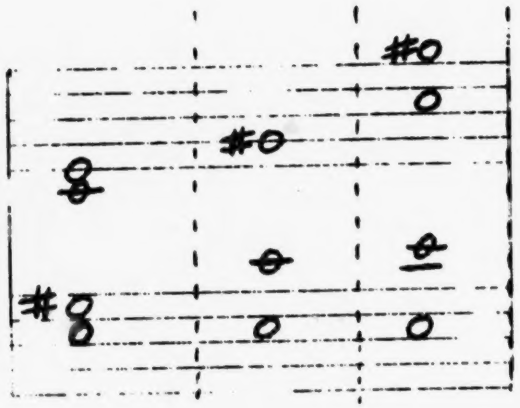
Skill	Measures	Procedure
b. Sing any note of a diminished seventh sonority built on a given pitch.		d. Build chord from top down with new voice, leaving out every other minor third and entering on a diminished fifth (the equivalent of two combined minor thirds). Check accuracy with piano.
		e. Open the score and sing in context. Check E diminished seventh chord tuning.
4. Perform motive fragment in parallel fourth progressions with another voice part.	60-62	4. Flash score transparency (see meas. 60-62).
		a. All sing tenor part as written.
		b. Sing the tenor part a perfect fourth lower.
		c. All sing the bass part as written.
		d. Sing the bass part a perfect fourth higher.
		e. Sing both parts together, altos sing with basses and sopranos sing with tenors.
		f. Sing in context, check accuracy of parallel perfect fourth texture against pedal tones.



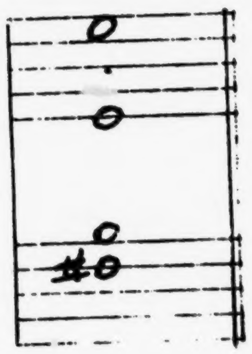
No. 1. Maj. 2 and 9



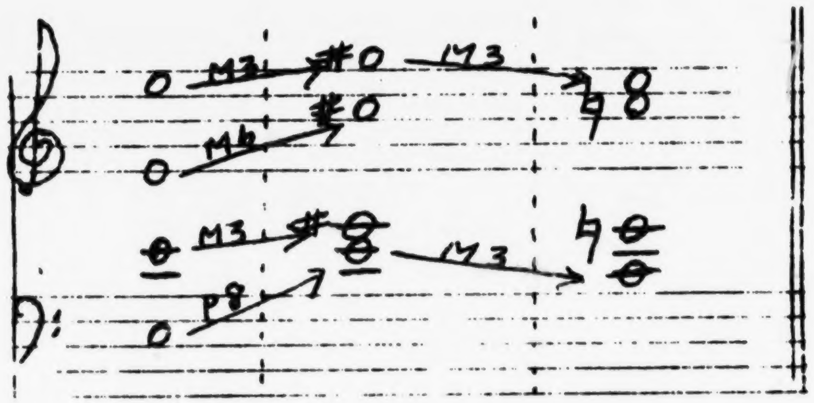
No. 2. Min. 2 and 9



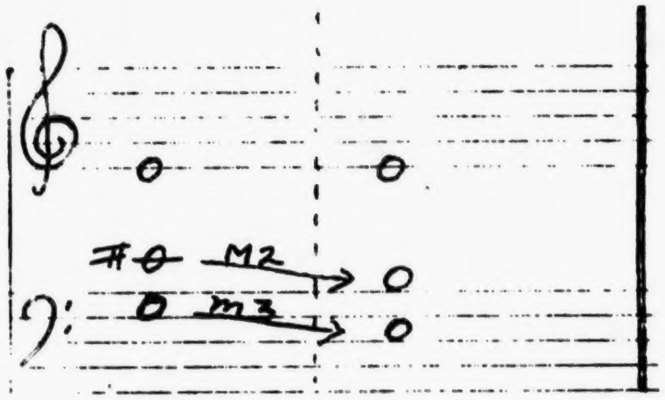
No. 3. Augmented



No. 4. Quartal


M3
M3
M6
M3
M3
P8

No. 5. Abrupt chord transition, E unison-C# min. - C maj.



No. 6. C# dim. -E perf. 5

PLATE V. "ANTHONY O DALY"--HARMONIC PATTERNS FOR DRILL

Suggested Order of Learning Activities

The following sequence of activities is recommended to integrate the instructions given in the preceding charts and to expedite the conceptualization of rhythmic, melodic, and harmonic features found in "Anthony O'Daly." It is recommended that the markings made by the present writer in the score be used for making the overlays.

1. Use the melodic and harmonic patterns for preliminary vocalization (see Plates III, IV, and V).

2. Open the score and study. The teacher helps students discover important features: canonic treatment of motive in close imitative entry points; overlapping rhythms in all parts; E tonality providing unity; stringendo section; dissonant relations between motive and pedal point; parallel perfect fourth progressions between bass and tenor; and descending diminished chords in the closing section.

3. Instruct the chorus to, "Sight read through the music without stopping, no matter what happens. Sing the intervals and rhythms with boldness. Try to sing expressively the first time."

4. Play a professional recording[1] while all singers watch the score and follow rhythmic procedure No. 1 (TABLE XIII).

5. Flash the rhythms on a screen with the overhead projector and follow rhythmic procedure No. 1.

6. Open the score and sing through softly while conducting and listening for parts and rhythms in piano. Observe proper phrasing, diction, vocal inflection, and breathing.

7. Flash transparent melodic overlays showing Phrygian and natural minor patterns and follow melodic procedure No. 1.

---

[1] Barber, "Anthony O Daly," the Gregg Smith Singers (Everest 3129, side 2, band 5.

8. Flash the harmonic overlays for meas. 1-25 and follow harmonic procedure No. 1.

9. Flash the rhythms showing stresses on rhythmic overlapping and follow rhythmic procedure No. 2.

10. Flash a melodic overlay showing the motive variation based on the natural and melodic minor scale patterns and follow the suggested procedure No. 2.

11. Flash a melodic overlay showing meas. 26-32 with Dorian scale referent tones in the tenor and soprano and a major first inversion in the alto. Follow melodic procedure No. 3.

12. Review meas. 0-39. Flash the intervallic and rhythmic transparencies as needed.

13. Flash a harmonic overlay for meas. 52-67 showing perfect fourth sonorities in parallel progression between the bass and tenor. Follow harmonic procedure No. 4 as needed and check accuracy with the piano.

14. Sing meas. 40-67 in context, stressing accurate perfect fourth relations between the tenor and bass. Stress good diction, tone, and expression, and check accuracy with the piano.

15. Flash the melodic overlays for meas. 40-67 as needed, giving special attention to the augmented rhythmic motive in the bass and the wide interval leaps in the bass and tenor.

16. Review meas. 0-67; ask the singers to speak with proper rhythm, tonal inflection, diction, and style, and then to sing observing the same principles. Check accuracy with the piano.

17. Flash the rhythmic patterns observing rhythmic procedure No. 3. Stress proper diction, phrasing, tonal inflection, and expression.

18. Flash harmonic overlays for meas. 13-59, observing procedures No's. 2 and 3.

19. Review from the beginning to the end, stopping where necessary to review rhythmic and pitch problems. Observe proper diction, tone quality, and expression.

20. Have singers in each section give self evaluation concerning special, individual trouble spots. Go through the score with each section, drilling intervals and rhythms as needed.

21. Record and play back for self evaluation. Quickly review trouble spots, if any.

22. Make the final recording.

A Jubilant Song

by Norman Dello Joio

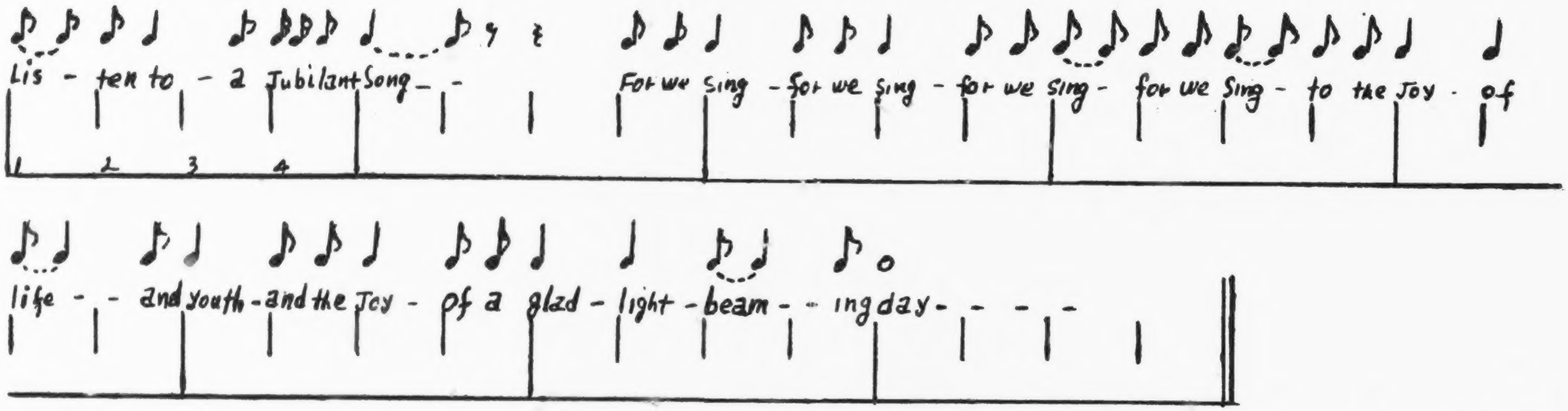
TABLE XVI

JUBILANT SONG--RHYTHMIC SKILLS AND RELATED LEARNING PROCEDURES

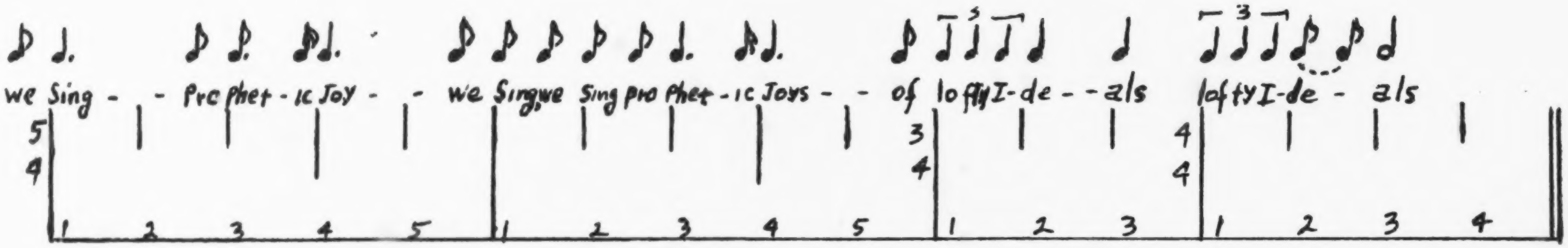
Skill	Measures	Procedure
1. Perform tonal and rhythmic patterns involving frequent changes of meter.	14-36, 37-50, 51-53, 62-63, 89-121	1. With score open, listen to a suitable recording.
		a. All singers conduct meters and mouth words while following the score and listening to the recording.
		b. Review sections involving meter changes and conduct and speak words together.
2. Perform syncopated rhythms and attacks which occur after the first, second, third, and fourth beats of the measures. (Refer to No.'s 2 and 3 of Table X, p. 77).	38, 40, 44-46, 48, 58-60, 66, 67, 80-82, 90-92, 95, 104, 105, 111, 112, 116-119, 122 127-135, 138, 140-142, 147-155, 158	2. Flash representative rhythm patterns.
		a. Chant words while clapping downbeat and pulsating secondary beats with voices and hands.
		b. Divide choir into two sections. One section taps pulse with heels, claps eighth-note subdivisions softly, and stresses the after-beat notes; other section taps pulse with heels, claps and speaks notated rhythms and words.
		c. Sing from scores in context while observing rhythms previously drilled.

TABLE XVI Continued

Skill	Measures	Procedure
		d. Teacher or student leader demonstrates when necessary by tapping subdivisions with foot and slowly clapping the rhythm, then has class repeat. Increase the speed and repeat, pulsating regular pulse with foot and clapping and speaking rhythm. Class repeats.
		e. Refer to the rhythm flash as needed in subsequent rehearsals.

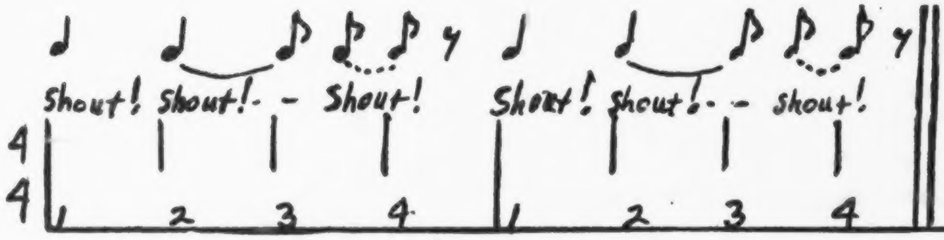

Lis - ten to - a Jubilant Song - -
For we sing - for we sing - for we sing - for we sing - to the joy - of
1 2 3 4
life - - and youth - and the joy - of a glad - light - beam - - ing day - - - -

No. 1. Meas. 67-67


we sing - - prophet - ic joy - - we sing we sing prophet - ic joys - - of lofty I - de - - als lofty I - de - als
5
4
3
4
4
4
1 2 3 4 5 1 2 3 4 5 1 2 3 1 2 3 4
3
3

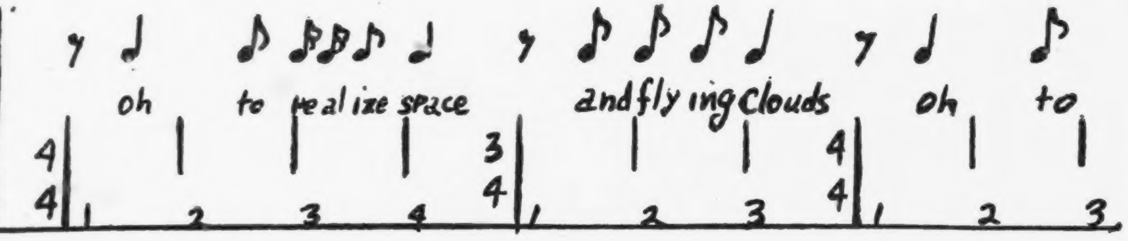
No. 2. Meas. 90-94, ♩ = 36

PLATE VI. JUBILANT SONG--RHYTHMIC PATTERNS FOR DRILL



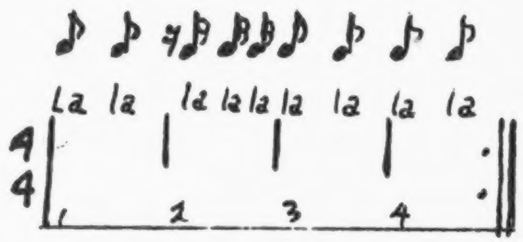
Shout! Shout! - - Shout! Shout! Shout! - - Shout!
4/4
1 2 3 4 1 2 3 4

No. 1. Meas. 108-109



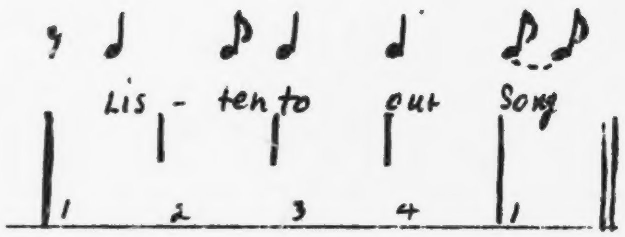
oh to realize space and flying clouds oh to
4/4 3/4 4/4
1 2 3 4 1 2 3 1 2 3

No. 2. Meas. 116-118



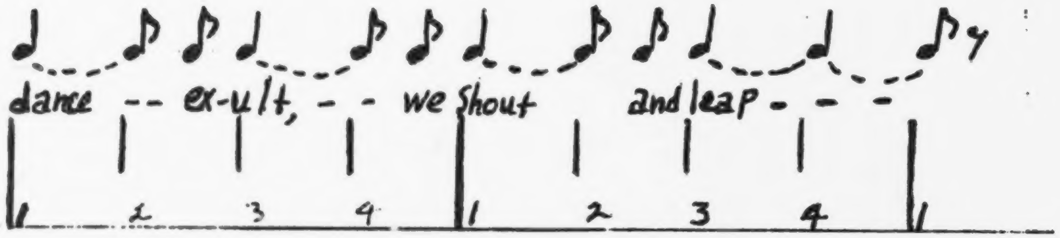
La la la la la la la la la
4/4
1 2 3 4

No. 3. Meas. 127



Lis - ten to our Song
1 2 3 4 1

No. 4. Meas. 140-141



dance -- ex-ult, - - we Shout and leap - - -
1 2 3 4 1 2 3 4 1

No. 5. Meas. 159-160

PLATE VII. JUBILANT SONG--RHYTHMIC PATTERNS FOR DRILL

TABLE XVII

JUBILANT SONG--MELODIC-PITCH AND RELATED LEARNING PROCEDURES

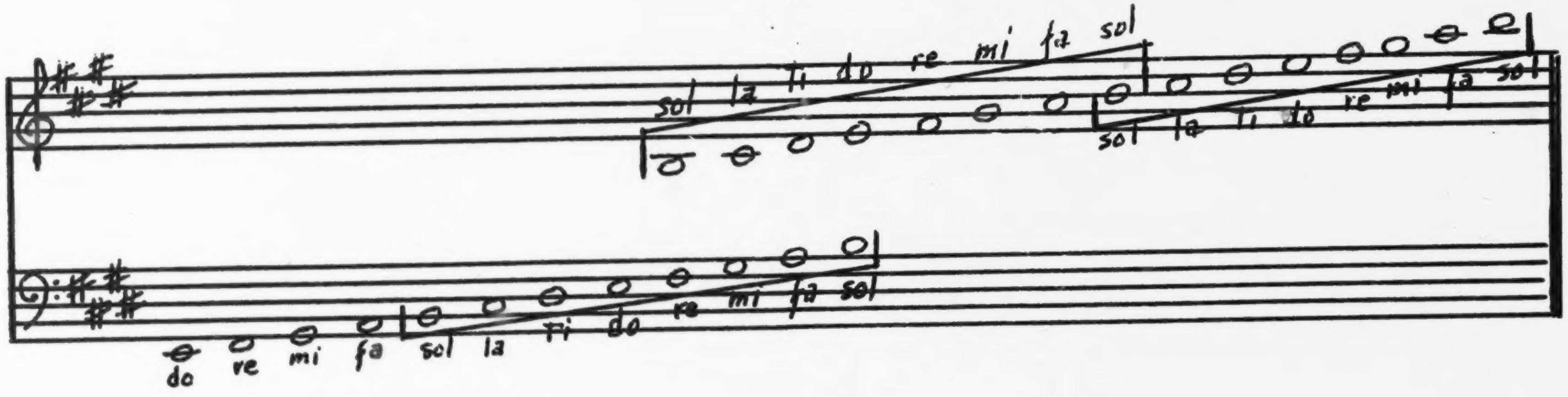
Skill	Measures	Procedure
1. Perform three-note motive stated in unison, octaves, perfect fifths, imitation, vertical placement, altered note arrangement, hocket and in alternation of minor and major thirds. (Refer to No.'s 1, 2, 3, 4, and 5 of Table XI).	14-21, 27-36, 49-50,125-126, 131, 149-157, 164-165	1. Flash E major, B Mixolydian scale.
		a. All choir sings first two phrases of "The First Noel" in E major, while the teacher points to appropriate scale steps.
		b. Repeat in Mixolydian mode on B (start: D#).
		c. Sing three-note motive from various tones in the scale: Meas. 14-21, 149-157--do-la-re Meas. 27-36--fa-re-sol Meas. 49-50, 125-126, 164-165--sol-mi-la Meas. 131--re-ti-mi
		d. Sing altered arrangement of motive while pointing to projected notes: la-sol-mi-sol-sol-mi-do-la-sol

TABLE XVII Continued

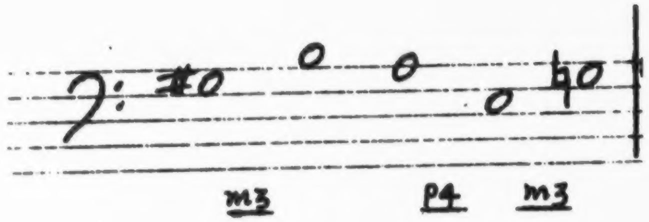
Skill	Measures	Procedure
		e. Altos and basses sing motive starting on the tone E, while tenors and sopranos sing the motive on A.
		f. Sing in context, stopping when necessary to point out motive occurrence.
2. Perform melodic combinations which serve as harmonic color devices for the motive.	38-44, 57-60, 66-70, 91-110, 131-141, 149-160	2. Open scores and read meas. 38-44.
		a. Choir listens as parts are played slowly on the piano.
		b. Sing slowly and softly, listening to intervals and harmonies while piano is playing.
		c. Tenors and sopranos sing soprano line, basses and altos sing alto line together using solfegge syllables (E major).
		d. Sopranos and tenors sing tenor line, altos and basses sing bass line together using solfegge syllables (E major).
		e. All choir sings unique intervals in bass line, meas. 41-43, entailing maj. 2, perf. 4, min. 3, maj. 2, perf. 5, perf. 8,

TABLE XVII Continued

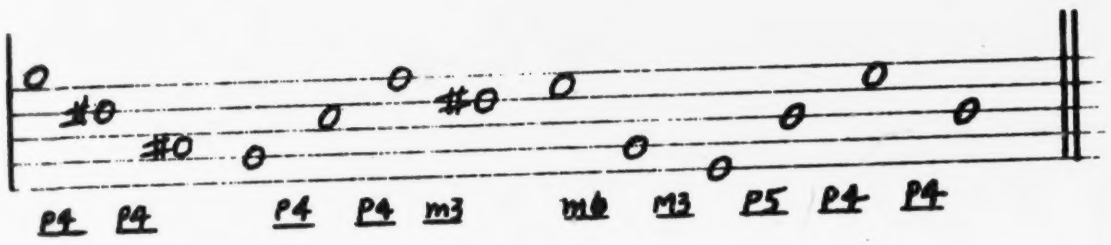
Skill	Measures	Procedure
		. maj. 2, maj. 2, maj. 2, min. 2, min. 3, perf. 4, min. 3, etc.
		f. Repeat in meas. 57-60, 66-70, 91-110 (D maj.), 131-141 (E maj.), 149-160 (E maj.).
		g. Lift problem intervals from score as they occur. Place on chalkboard and have all choir sing together. Identify each interval and put back into context.


sol
la
ti
do
re
mi
fa
sol
sol
la
ti
do
re
mi
fa
sol
do
re
mi
fa
sol
la
ti
do
re
mi
fa
sol

No. 1. E major and B Mixolydian scales, basis for three-note motive

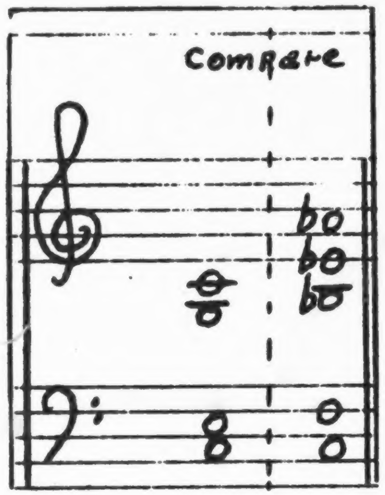


No. 2. Alto and bass, meas. 40

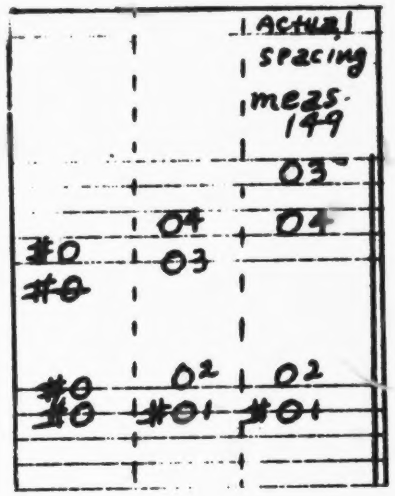

P4
P4
P4
P4
m3
m6
M3
P5
P4
P4

No. 3. Bass, meas. 91-94

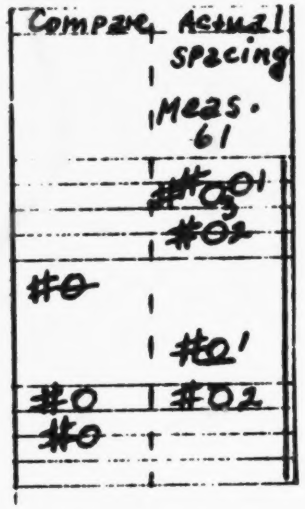
PLATE VIII. JUBILANT SONG--MELODIC-PITCH PATTERNS FOR DRILL



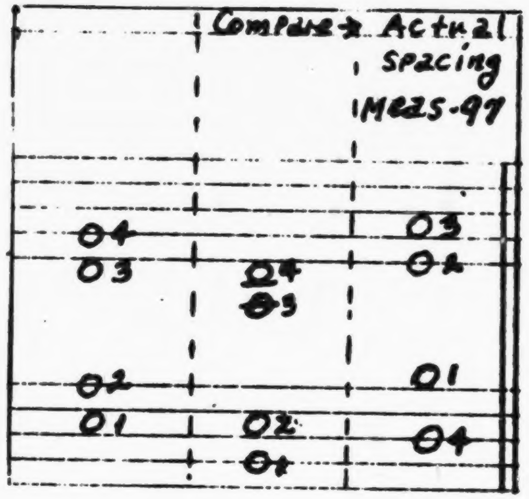
No. 1. C maj., C quartal


Actual
spacing
meas. 149

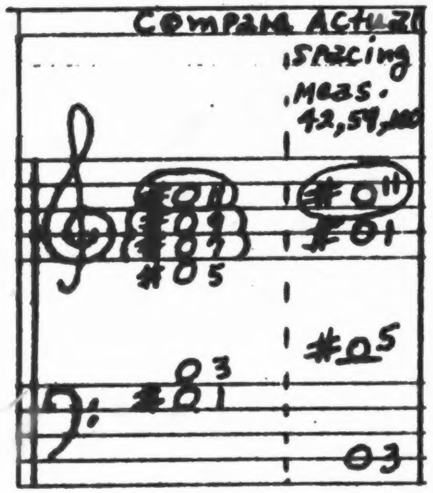
No. 2. F# major, F# quartal


Compare
Actual
spacing
Meas. 61

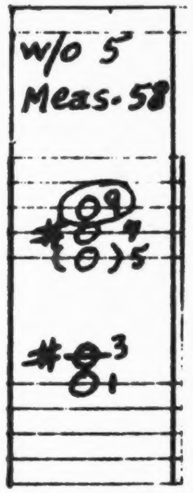
No. 3. D# quartal


Compare
Actual
spacing
Meas. 97

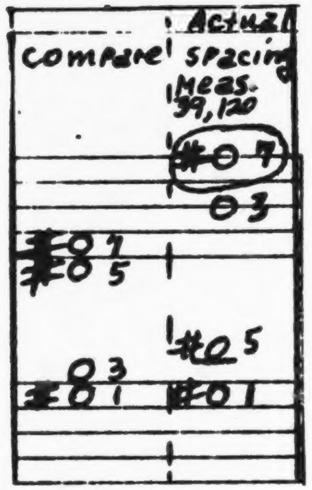
No. 4. E-B quartal


Compare
Actual
spacing
Meas. 42,59,100

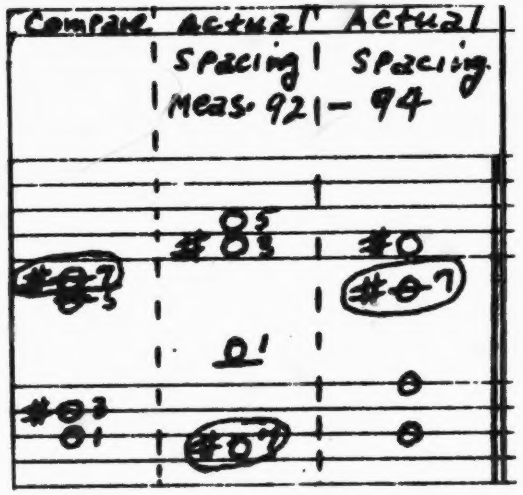
No. 5. G# min., added 11



No. 6. A maj., added 9


Compare
Actual
spacing
Meas. 39,120

No. 7. G# min.


Compare
Actual
spacing
Meas. 92
Actual
spacing
- 94

No. 8. D maj. maj. 7

PLATE IX. JUBILANT SONG--HARMONIC PATTERNS FOR DRILL

TABLE XVIII

JUBILANT SONG--HARMONIC SKILLS AND RELATED LEARNING PROCEDURES

Skill	Measures	Procedure
1. Perform chords built on perfect fourth intervals.	38, 60-61, 91, 97-99, 108, 138, 140, 149-151	1. Flash quartal harmonies along with major chords for comparison.
a. Sing arpeggiated.		a. Choir sings major chords upon hearing referent tone.
b. Sing any pitch of quartal chords on a given pitch.		b. Sing quartal chords melodically and harmonically adding each chord note from bass up. Check accuracy with piano.
		c. Sing each listed measure containing quartal chords in context. Stop on each quartal harmony. Check accuracy with piano.
2. Perform chords with added sixth intervals.	38, 39, 74, 92, 96, 100, 116, 120, 125-126, 168	2. Flash chord with added sixth along with major chord without sixth.
a. Sing arpeggiated.		a. Sing major chord.
b. Sing any pitch of chords with added sixths built on a given pitch.		b. Sing the major chord with added sixth. Check accuracy with piano and compare.
		c. Sing listed measures in context. Stop and

TABLE XVIII Continued

Skill	Measures	Procedure
		check accuracy on chords with added sixths.
3. Perform chords with added seconds.	39, 42 (+6th), 67, (+4th), 69, 139, 141	3. Flash chords with added seconds with major chord for comparison. Follow similar procedures as above.
a. Sing arpeggiated.		
b. Sing any pitch of added second chords built on a given pitch.		
4. Chords with added fourths.	43, 59, 68, 92, 93, 99, 101 (solo), 156	4. Flash major chord and chord with added fourth. Sing and compare according to above procedure.
a. Sing arpeggiated		
b. Sing any pitch of chords with added fourths built on a given pitch.		
5. Perform minor minor seventh chords (sound similar to chords with added sixths).	38 (w/o fifth), 39, 42, 43, 96, 152, 153	5. Flash overlays showing the voice part with the minor seventh circled.
a. Sing arpeggiated.		a. Sing the chord with the seventh and without the seventh. Compare the minor chord alone with the added seventh. Check accuracy.

TABLE XVIII Continued

Skill	Measures	Procedure
5. Cont.		5. Cont.
b. Sing any pitch of minor minor seventh chords built on a given pitch.		b. Sing the listed measures in context, stopping on the minor minor seventh chords to check accuracy.
6. Perform major major seventh chords.	42, 92, 93, 94, 96, 114	6. Flash overlay showing the major seventh part. Choir sings the D major seventh chord with and without the tenor (meas. 93), with and without the alto (meas. 93, 94).
a. Sing arpeggiated.		
b. Sing any pitch of major major seventh chords built on a given pitch.		

Suggested Order of Learning Activities

The following sequence of activities is recommended to integrate the instructions given in the preceding charts and to expedite the conceptualization of rhythmic, melodic, and harmonic features found in A Jubilant Song. It is recommended that the markings made by the present writer in the score be used for making the overlays.

1. Use the melodic and harmonic patterns for preliminary vocalization (see Plates VIII and IX).
2. Open the score and study the music. The director helps students discover highlights of the music: accidentals, multimeters, homophonic and polyphonic textures.
3. Instruct the chorus to, 'Sight read straight through the music without stopping, no matter what happens. Try to give a beautiful performance the first time."
4. Play a professional recording, or have an accompanist play through the score, while singers follow the music, mouth the words, and conduct the metric patterns.
5. Flash rhythmic patterns on a screen by means of an overhead projector. Follow rhythmic procedures No. 2 a-and b. Read words with correct style, tone, and diction.
6. Practice meas. 14-50. Flash transparent melodic overlays and follow melodic procedure No. 2 a-e.
7. Flash transparent melodic overlays for meas. 53-94 and follow melodic procedure No. 1. Review meas. 14-50 concentrating on meas. 55-94.
8. Flash harmonic overlays for meas. 38-43, 58-61, and 91-102. Follow harmonic procedures No.'s 1-6.
9. Follow melodic procedure No. 2 f.
10. Review meas. 14-85 and polish meas. 90-126. Re-read words in difficult passages with correct style and diction.

11. Flash harmonic overlays showing added sixth chords and minor minor-seventh chords. Follow harmonic procedures No.'s 2 and 5.

12. Review meas. 14-126 and polish meas. 127-170.

13. Flash harmonic overlays showing chords with added fourths, major sevenths, and added seconds. Follow harmonic procedures No.'s 3, 4, and 6.

14. The director should check each section for student self evaluation and should drill any weak spots. Use the overlays as needed.

15. Review the music using overlays as needed and re-reading the parts.

"The Last Invocation"

from Carols of Death

by William Schuman

TABLE XIX

"THE LAST INVOCATION"--RHYTHMIC SKILLS AND RELATED LEARNING PROCEDURES

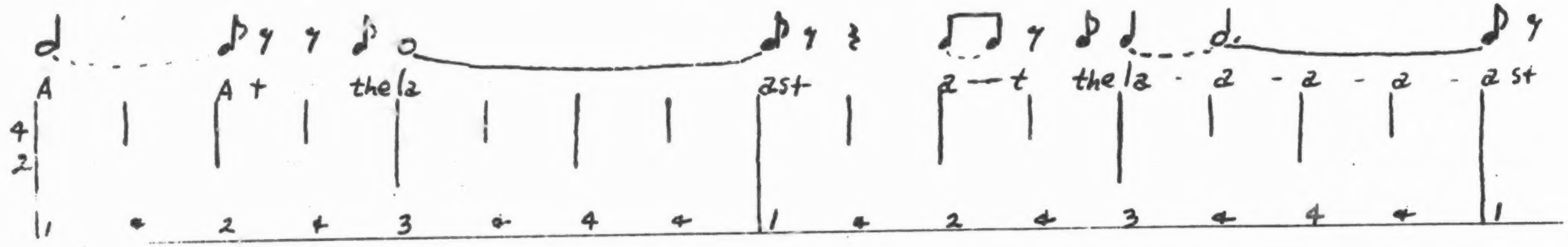
Skill	Measures	Procedure
1. Perform tonal and rhythmic patterns based on constantly changing meters:		1. Use of recording and scores.
		a. Play a suitable recording. All singers watch score, conduct divided beat patterns, and words while listening to recording.
4/2, 3/2, 2/2	Common throughout	b. Using scores, all singers speak words rhythmically, emphasizing propser diction, vocal inflection, phrasing style while conducting patterns.
2. Perform tonal and rhythmic patterns based on subdivisions of four, six, three, and eight equal parts:		2. Flash rhythms involving beat subdivisions.
		a. All singers clap downbeat, pulsate subdivisions (two per beat) with hands, and four subdivisions with voices, while speaking the words rhythmically.
four	1-3, 7, 9, 10, 13, 17-19, 21-22, 24, 26-28	b. On second pattern involving six subdivisions per beat, singers conduct a divided four pattern, pulsate three equal pulsations with voices against each subdivided conducting beat, while speaking the words rhythmically.
six	6, 7, 8, 15	

TABLE XIX Continued

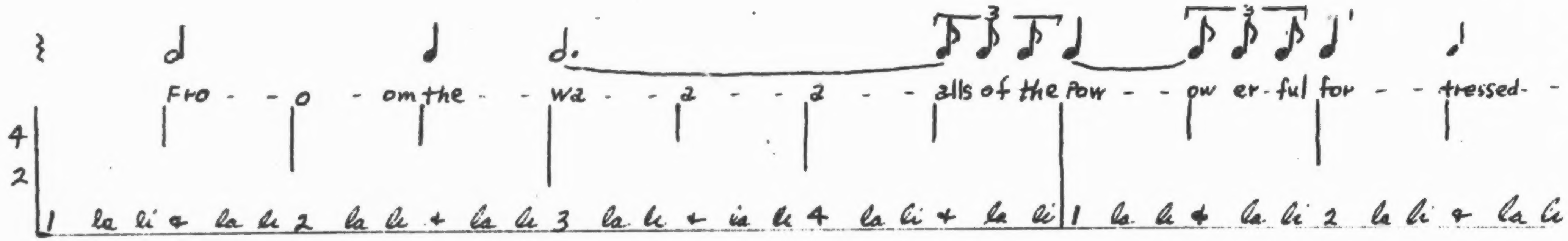
Skill	Measures	Procedure
2. Cont.		2. Cont.
eight	17	c. For the final rhythmic pattern, continue with three equal voice pulsations per subdivision of the beat. Change the voice accent every two pulsations (three accents per six subdivisions instead of two per six) when chanting three on the fourth beat. On the words "softness" vocally subdivide into four equal parts.
		d. Teacher demonstrates on any of the preceding as need arises.
		e. Sing softly all parts using same vocal inflections, emphasizing proper diction, phrasing, with piano playing parts if necessary.
3. Perform rhythms involving syncopation and attacks on the after beat.	6, 8, 10, 12, 14, 16, 19, 26	3. Flash representative rhythms.
		a. Tap primary pulse with feet and gently clap subdivided pulse while speaking rhythms being projected.

TABLE XIX Continued

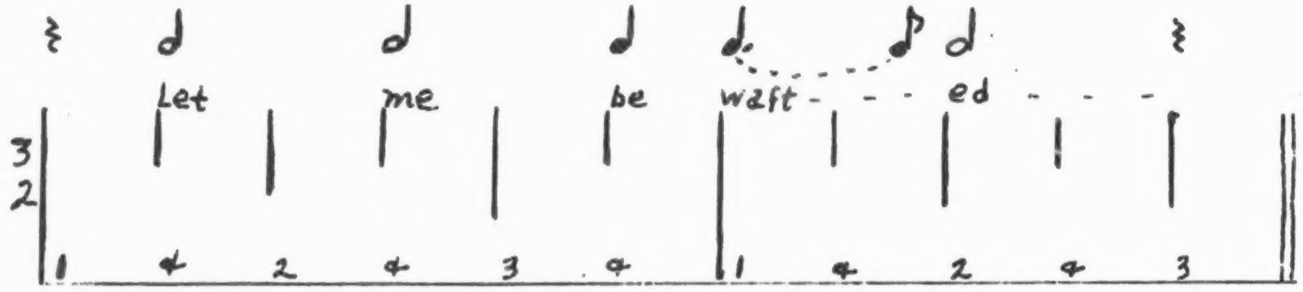
Skill	Measures	Procedure
3. Cont.		3. Cont. b. Conduct metric pattern and speak words involving syncopated rhythms. c. Sing in context while thinking and "feeling" the above activities.


A
A + the la
ast
a — t the la - a - a - a - a st
4
2
1 + 2 + 3 + 4 + 1 + 2 + 3 + 4 + 1

No. 1. Meas. 1-3 (𝅗𝅥 = 36 or ♩ = 72)


Fro - - o - om the - - wa - - a - - a - - alls of the pow - - ow er - ful for - - tressed - -
4
2
1 la li + la li 2 la li + la li 3 la li + la li 4 la li + la li 1 la li + la li 2 la li + la li

No. 2. Meas. 6-7 (𝅗𝅥 = ♪♪♪ ♪♪♪), rhythmic overlapping


Let me be waft - - - ed - - -
3
2
1 + 2 + 3 + 1 + 2 + 3

No. 3. Meas. 12-13, syncopation

PLATE X. "THE LAST INVOCATION"--RHYTHMIC PATTERNS FOR DRILL

TABLE XX

"THE LAST INVOCATION"--MELODIC-PITCH SKILLS AND RELATED LEARNING PROCEDURES

Skill	Measures	Procedure
1. Perform passages derived from the Phrygian scale:		1. Flash appropriate pages from score with melodic overlays showing Phrygian scale and its relative major scale for each linear progression.
Soprano	1-5, 19-20, 21-25, 29-31	a. All choir sings a familiar song ("Yankee Doodle" or a Christmas carol) or the scale while pointing to the major scale.
Tenor	16-20, 29-31	b. Sing the same song starting on the Phrygian relation or sing the Phrygian scale.
Alto	29-31	c. Sing the tones of the particular progression. Check accuracy with piano.
Bass	16-18	
2. Perform passages derived from the chromatic scale:		2. Flash appropriate pages using the same overlay as above with chromatic scale marked in color.
Bass	1-5	a. All choir sings the appropriate progressions. Check accuracy with piano. Notice all minor seconds.
Alto	14-15	
Tenor	17, 27-28	b. Sing measures in context with other parts. Check accuracy with piano.

TABLE XX Continued

Skill	Measures	Procedure
3. Perform passages derived from the harmonic minor scale:		3. Flash appropriate pages on the same overlay as above with appropriate intervals placed between tones.
Tenor and bass	10-11	a. All choir sings tones with interval names, of tenor, then separately of bass. Open score to meas. 10-13.
		b. Soprano sings with tenor, alto with bass, and both parts sing together. Continue to first note of next page. Check accuracy with piano.
		c. Hum all parts softly while piano plays. Continue to meas. 12-13 in the same manner.
4. Perform passages derived from synthetic scale (free note placement).	12-13	4. Flash melodic overlays showing interval patterns in meas. 12-13 for each part.
		a. All voices sing soprano separately using interval names. Add alto, basses singing with altos and tenors with sopranos.

TABLE XX Continued

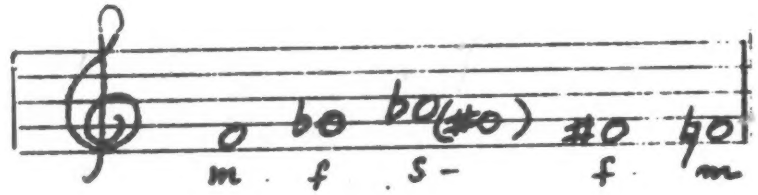
Skill	Measures	Procedure
4. Cont.		4. Cont.
		b. Do same with tenor and bass parts. Rehearse separately, if necessary. Check accuracy with piano.
		c. Listen as piano plays all parts together. Sing in context. Check accuracy with piano.
5. Perform passages derived from the Dorian scale:		5. Flash appropriate pages with melodic overlay showing Dorian scale and relative major superimposed over linear progressions.
Tenor and soprano	6-7	a. All sing major scale.
Tenor	21-23	b. All sing Dorian scale.
		c. All sing progressions. Check accuracy with piano.
		d. Open score and listen to piano. Sing in context.
6. Perform entries after mixed durations of rest:		6. Flash melodic overlays showing interval names and arrows connecting the referent tone to the

TABLE XX Continued

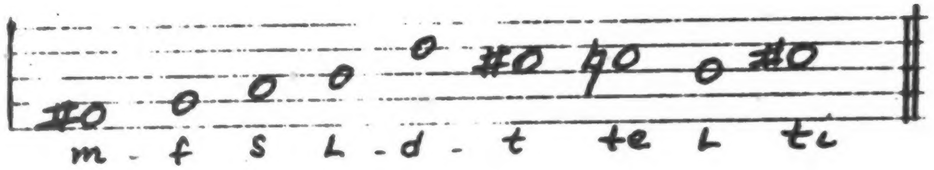
Skill	Measures	Procedure
6. Cont.		6. Cont.
Tenor and bass	16	new interval, enharmonic intervals in parenthesis.
Soprano and alto	19, 20	a. Tenors and bass sing the last tone of the alto (meas. 15) G♭. Enharmonically sing G♭ as F# and sing the new tone.
		b. Sing meas. 14-16 in context, thinking of the alto part. Check accuracy with piano.
		c. Soprano and alto sing the last tone of the tenor, meas. 18, C#. Sing the new tone and check accuracy with piano. Sing meas. 16-19 in context. Soprano and alto mentally sing with tenor. Sing new pitch and check accuracy with piano.
		d. Soprano and alto find referent tones (soprano a minor second below tenor and the alto a major second above bass). Follow same procedure as above. Mentally sing the part used as a referent.

TABLE XX Continued

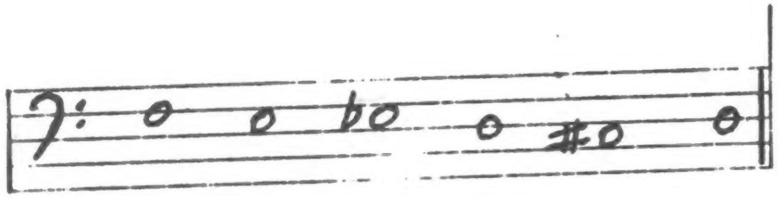
Skill	Measures	Procedure
7. Enharmonic intervals		7. Flash melodic overlays showing enharmonic relationships: B=C, G#=A♭ (meas. 15, 20, 24).
Dim. 2 = perf. prime tenor alto	 12 15	a. All sing B to C♭ (dim. 2 = perf. prime) in meas. 12 tenor, then sing in context. Check accuracy with piano.
Aug. 2 = min. 3 soprano	 23-24	b. All sing G# to A♭ (dim 2 = perf. prime) meas. 14-15 alto. Sing in context with all parts. Check accuracy with piano.
Doubly dim. prime = maj. 2 tenor	 20-21	c. All sing G# to G♭ in tenor, meas. 20-21 (doubly dim. prime = maj. 2). All sing C# to E♭ in bass, meas. 20-21 (dim. 3 = maj. 2). Check accuracy for each. Sing bass and tenor together, then in context with other parts. Check accuracy with piano.
		d. Include other problem intervals on the melodic overlays as needed.



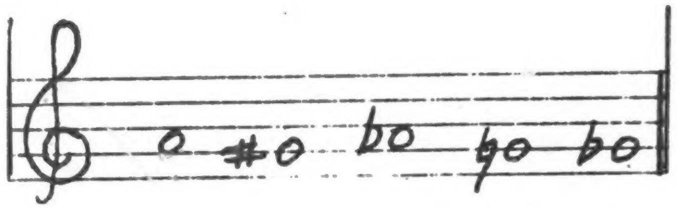
No. 1. Meas. 1-5, 22-23, soprano, Phrygian



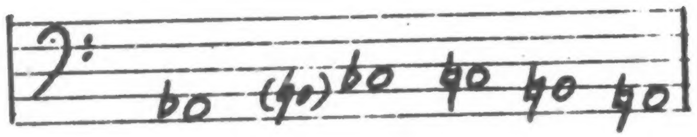
No. 2. Meas. 16-18, tenor, Phrygian, D = do



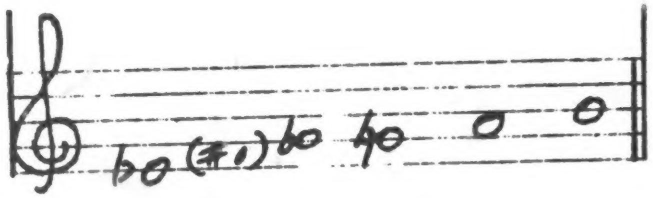
No. 3. Meas. 1-5, bass, chromatic



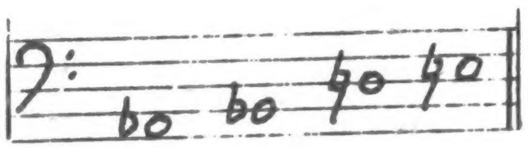
No. 4. Meas. 14-15, alto, chromatic



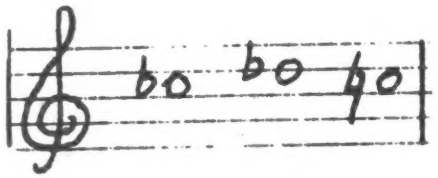
No. 5. Meas. 10-11, bass, harmonic min.



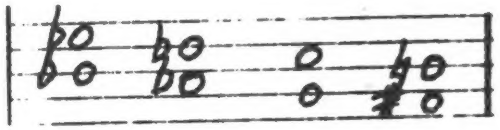
No. 6. Meas. 10-11, tenor, harmonic min.



No. 7. Meas. 12-13, bass



No. 8. Meas. 12-13, tenor



No. 9. Meas. 12-13, soprano and alto

PLATE XI. "THE LAST INVOCATION"--MELODIC-PITCH PATTERNS FOR DRILL

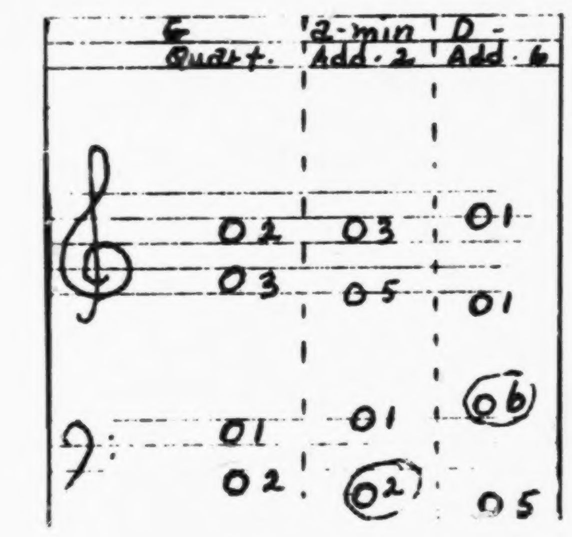
TABLE XXI

"THE LAST INVOCATION"--HARMONIC SKILLS AND RELATED LEARNING PROCEDURES

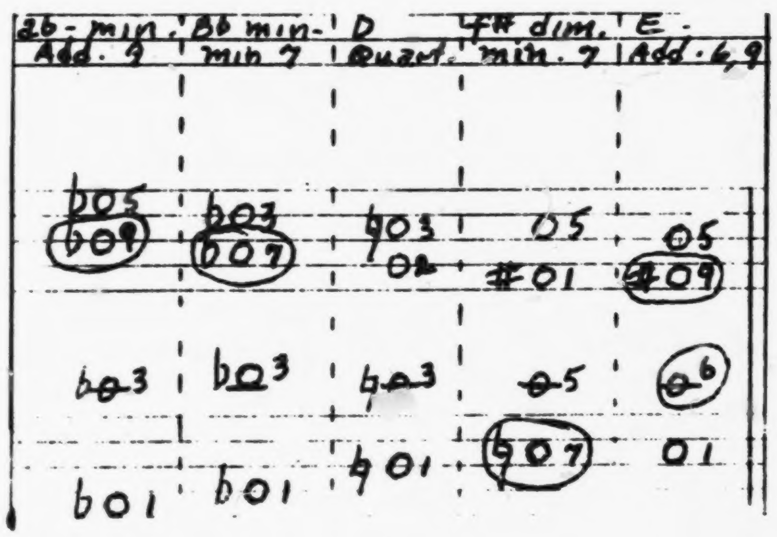
Skill	Measures	Procedure
1. Perform unique two-part progressions in arpeggiated style and in block style.	2-3, 7, 8-9, 14-15, 16-18	1. Flash appropriate pages with harmonic overlays showing each vertical interval placement.
		a. Listen to the sonority as each progression is played on piano and followed on the projection. Soprano and tenor sing together, alto and bass sing together, when men's or women's parts are separate.
		b. Sing the same progression and check accuracy with piano. Stop on intervals which need drill.
		c. Manually write in melodic intervals which may present problems. Sing and check accuracy with piano.
		d. Sing all two-part progressions using the score.
2. Perform unique four-part chords:		2. Flash appropriate pages using same overlays as above. Include four-part chord analysis with colored circles around the added notes to traditional chords.
Added 2 and tritone	4, 13, 22, 24	

TABLE XXI Continued

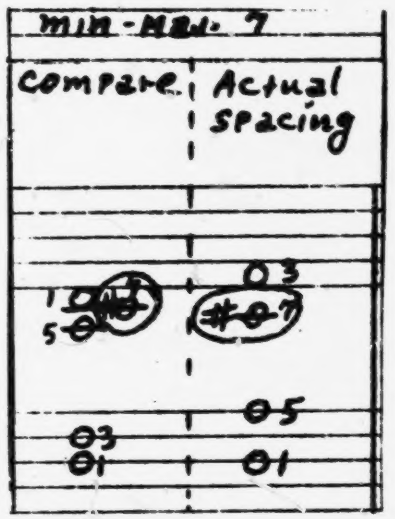
Skill	Measures	Procedure
2. Cont.		2. Cont.
Added 2	4, 11, 12, 13, 22, 31	a. Sing added note chords with and without added tones by having the particular voice part whose note is circled sing first the circled note, then without.
Added maj. 7	22, 24, 26	
Added min. maj. -7	5, 23, 25, 26	b. Piano plays these chords in same manner to check accuracy.
Added min. min. -7	12, 24	c. Sing in context, stopping to tune chords as above.
Quartal (perf. 4)	10, 11, 12	
Dim. maj. 7	31	
a. Sing in arpeggiated style.		
b. Sing any tone of the preceding chords from a given pitch.		


E
Quart.
a-min
Add. 2
D -
Add. 6

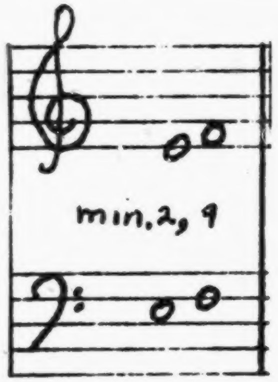
No. 1. Meas. 11


ab - min.
Add. 9
Bb min-
min 7
D
Quart.
F# dim.
min. 7
E -
Add. 6, 9

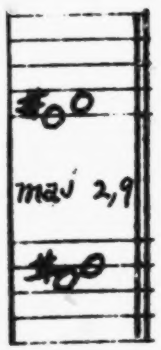
No. 2. Meas. 12-13


min - Maj. 7
compare
Actual spacing

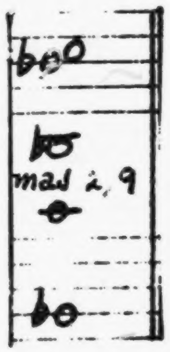
No. 3. Meas. 5, 23, 25, 26



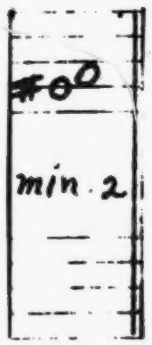
No. 4. Meas. 2



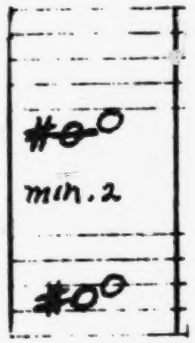
No. 5. Meas. 6



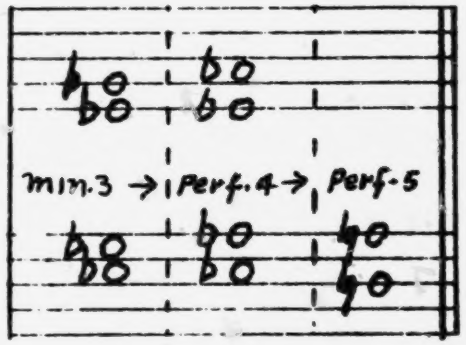
No. 6. Meas. 9



No. 7. Meas. 14



No. 8. Meas. 19


min. 3 →
Perf. 4 →
Perf. 5

No. 9. Meas. 2-3

PLATE XII. "THE LAST INVOCATION"--HARMONIC PATTERNS FOR DRILL

Suggested Order of Learning Activities

The following sequence of activities is recommended to integrate the instructions given in the preceding charts and to expedite the conceptualization of rhythmic, melodic, and harmonic features found in "The Last Invocation."

1. Use the melodic and harmonic patterns for preliminary vocalization (see Plates XI and XII).

2. Open the score and study. The teacher helps students discover main features: two-part and four-part texture; contrary motion; multi-meters; accidentals; enharmonic intervals; dissonance; and unusual chord structures.

3. Instruct the chorus to, 'Sight read straight through the music without stopping, no matter what happens. Sing the intervals and rhythms with boldness. Feel as if you can render a beautiful performance the first time. Look ahead."

4. Play a suitable recording[7] while all choir members follow the score, conduct the metric patterns, and mouth the words.

5. Flash representative rhythms on a screen with an overhead projector and follow rhythmic procedures No. 2 a, b, and c.

6. Open the score, sing through softly, and listen to the piano. Use proper phrasing, diction, and inflection while conducting subdivided patterns.

7. Flash transparent melodic overlays for meas. 1-13 and follow melodic procedures No.'s 1, 2, 3, 4, 5, and 7 as needed.

---

[7] Schuman, Carols of Death, the Gregg Smith Singers (Everest 3129) side 2, band 1.

8. Flash harmonic overlays for meas. 1-13 and follow harmonic procedures No.'s 1 and 2 as needed.

9. Review meas. 1-13 using above procedures as needed.

10. Flash melodic overlays for meas. 12-17 and follow melodic procedures No. 's 1, 2, 3, 6, and 7 as needed.

11. Flash harmonic overlays for meas. 12-17 and follow harmonic procedures No.'s 1 and 2 as needed.

12. Sing meas. 1-18 in context. Stop and review as necessary. Check for accuracy.

13. Flash melodic overlays for meas. 19-25 and follow melodic procedures No. 's 1, 2, 6, and 7 as needed.

14. Flash harmonic overlays for meas. 19-25 and follow harmonic procedure No. 2.

15. Review meas. 1-25. Speak the words rhythmically for proper phrasing and inflection and apply above procedures as needed.

16. Flash melodic overlays for meas. 26-31 and follow melodic procedures No. 's 1 and 2.

17. Flash harmonic overlays for meas. 26-31 and follow harmonic procedures as needed.

18. Review meas. 1-31. Stop to correct pitch or rhythmic errors. Use overlays where necessary.

19. Review from the beginning to the end. Speak words rhythmically with correct diction, style, phrasing, and tonal inflection. Sing in the same manner.

20. Record for preliminary evaluation.

21. Listen to a professional recording again, while following the score. Have the students listen to their own recording, evaluate progress, and correct mistakes.

22. Polish, review, and make a final recording for evaluation.

THE EXPERIMENTAL DESIGN

An experimental validation was designed as the final phase of the study to determine significant differences between traditional methods employed in teaching contemporary choral compositions and the methods devised and investigated in this study.

Initially the experimental testing was performed in May, 1969, using a random grouping of the members of the A Cappella Choir of the Brigham Young University, Dr. Ralph Woodward, director, as the control and experimental groups. However, due to the usual spring pressures of tours, concerts, testing, etc., the subjects were available for three rehearsals instead of the designed eight. The treatment of both control and experimental groups had to be done within the same hours, necessitating the use of two directors and further contaminating the experiment with an uncontrolled variable. Under these conditions the results indicated little difference between the control and the experimental groups.

The reasonable interpretation of this phenomenon seemed to be that the test activity provided a low ceiling which both groups were able to exceed. In other words, this skilled choir, first place winner of the 1968 International Eisteddfod at Llangollen, Wales, was already quite at ease with contemporary musical idioms. This is further evidenced by the fact that many students had to disqualify themselves in one or more of the three numbers because they already knew the music. As individual singers they were sufficiently adept that in three rehearsals they were independently able to master the music with or without assistance from the director. It is precisely because such a choir is a-typical that the present investigation is significant. To correct the problems of the first testing a second testing program was carried out in October, 1969, as follows.

Seventy subjects, members of the Ricks College (Rexburg, Idaho) A Cappella Choir, were randomly assigned into control and experimental groups. All choir members had passed the same entrance screening auditions in terms of vocal proficiency.

All participants were aware of being involved in an experimental activity, but were not made aware of whether they belonged to the experimental or the control group. Recordings were used with both groups to overcome the novelty effect in one. The principal investigator worked with both groups to achieve bias control.

Three compositions were selected for the study: "The Last Invocation," "Anthony O'Daly," and A Jubilant Song. For each number, each group was allowed two minutes to study the composition, then a recording of that compostiion was made as a pre-test to determine sight reading skills.

The music used in the experiment was unfamiliar to all of the subjects. Those who had previously encountered one of the pieces were excluded during those particular selections. Subjects of both groups were not allowed to take the music from the rehearsal and hence worked with each selection an equal amount of time.

Ten sessions were held with each group. Two of these sessions were spent in sight reading, reviewing, and recording the music. A final recording was made to determine the degree of progress achieved by each group during the eight subsequent treatments. The pre-treatment and post-treatment tape recordings were made by the same equipment and personnel under the same acoustical conditions. Standard instructions were given to both groups.

Traditional methods used with the control group consisted of warm-up exercises and drills based on the music to be learned, but without visual aids or attempts to teach theoretical concepts. This was done by an imitative "lining out" procedure whereby melodic patterns or harmonies were sung or played on the piano, and the subjects responded by singing the melodic or harmonic patterns. No attempt was made to define intervallic, harmonic, or rhythmic meanings in the music for the control group. Subsequent rehearsals dealt with problems of learning the music only in a rote drill manner and only when causing difficulty to the singers. At such times the problem passage was played by the pianist or sung by the conductor, then drilled by the choir until the desired behavior change was made.

The experimental group, on the other hand, were exposed to the methods described in the study and given systematic help in analyzing the nature of problems as they were encountered.

A jury of three judges, Dr. Chester W. Hill, Dr. Lamar Barrus, and Dr. Darwin Wolford, all of the Ricks College faculty, independently evaluated the recordings at the conclusion of the experiment to determine whether a significant degree of progress was made by each group between the pre-recording and the post-recording. Tape reproductions of both groups were played in random order and were not identified to the judges. Each judge listened to each recording until he could make the appropriate judgment of the progress for the particular group being heard. Judges were not informed of the details of the experimental design. Primary stress for judging was placed upon rhythmic and pitch accuracy.

RESULTS

The specific results of the analyses of the three compositions used in this study are given in table form in the body of the report, first for the skill requirements deriving from the analysis, second for the related learning activities devised to meet those skill requirements. While the experimental design used only three composition, (Samuel Barber's "Anthony O'Daly" from Reincarnations, Norman dello Joio's Jubilant Song, and William Schuman's "The Last Invocation" from Carols of Death), intensive analysis was made of all eight compositions adjudged typical of the peculiar problems of contemporary choral music:

1.	Samuel Barber	Reincarnations
2.	Norman Dello Joio	Jubilant Song
3.	William Schuman	"The Last Invocation" (from Carols of Death)
4.	Vincent Persichetti	"Gloria" (from Mass)
5.	Daniel Pinkham	Stabat Mater
6.	Lukas Foss	Psalms
7.	Charles Ives	Three Harvest Home Chorales
8.	Aaron Copland	In The Beginning

From the analysis it was determined that about ninety per cent of the problems peculiar to contemporary composition were contained in the three numbers selected for the experimental design, the Barber, the Dello Loio and the Schuman.

The following rhythmic features were identified, isolated, and related to the skills implied:

1. Multi-meters or their equivalent effects, in Copland, Dello Joio, Foss, Persichetti, Pinkham and Schuman.

2. Polyrhythms, commonly in Ives and sparingly in Copland.

3. Word inflections which dominate the rhythmic flow in either rapid parlando, Gregorian chant, or responsorial style. Varying degrees in Copland, Ives and Persichetti.

4. Sub-divisions of pulse with alternating two's and three's and involving extended pulses, in Copland, Foss and Dello Joio.

5. Syncopation. Not unique to contemporary music, but presenting problems to singers, in Barber, Dello Joio, Foss and Schuman.

6. Notes of attack which occur on the after-beat, in Dello Joio and Schuman.

7. Rhythmic overlapping involving a continuance of tone held over the bar line, in Barber, Foss and Pinkham.

8. Subdivisions of pulse into equal parts of alternating fours, sixes, threes, and eighths, in Schuman.

The following pitch features were identified, isolated, and related to the skills implied:

1. Chromatic structures used in ambiguous tonal context, in Barber, Ives and Schuman.

2. Phrygian patterns, in Barber, Persichetti and Schuman.

3. Dorian patterns, in Barber, Persichetti and Schuman.

4. Aeolian patterns, in Barber and Persichetti.

5. Locrian patterns, in Persichetti and Ives.

6. Synthetic patterns (freescale placement), in Schuman, Ives and Pinkham.

The following harmonic features were identified, isolated, and related to the skills implied:

1. Polychords, in Copland and Ives.

2. Added note chords of seconds, fourths and ninths, in Copland, Dello Joio, Foss, Ives, Persichetti, and Pinkham.

3. Quartal chords in Copland, Dello Joio, Ives, Persichetti and Pinkham.

4. Chords with added sixths, in Copland, Dello Joio, Foss, Ives, Persichetti, Pinkham and Schuman.

5. Chords with sevenths, in Barber, Copland, Dello Joio, Persichetti, Pinkham and Schuman.

6. Chords containing tritones, in Persichetti, Barber, Pinkham and Schuman.

The results from the experimental design, determining the effect of treatment (assistance with analytical and conceptual understanding of the musical content and specific correlated drill for skill development during the rehersals) on the experimental group as opposed to rote-drill procedures with the control group, were as follows:

1. The experimental group was unanimously judged to have demonstrated a higher degree of rhythmic accuracy than the control group.

2. The experimental group was unanimously judged to have demonstrated a higher degree of pitch accuracy than the control group.

3. The experimental group was unanimously judged to have demonstrated greated precision and confidence than the control group, the judges making such free comments as: ". . . more power, sureness, rhythmic vigor --fewer errors"; "more confident in general -- fewer errors"; ". . . a cleaner, more accurate performance on all three numbers."

4. The experimental group was unanimously judged to have demonstrated greater improvement between the pre-treatment recording and the post-treatment recording.

However, an unpredicted concensus of two of the three judges came through without inter-consultation in the free comments:

5. The control group was judged to have sung with better ensemble feeling, as reported in the statement of better ". . . ability to listen to one another, to vary pitch so as to arrive at a blend of harmony, etc." Further descriptions added: the control group ". . . seemed to find their pitches more from each other than from horizontal reading of their parts." "Since Anthony O'Daly is more tonal and employs more imitation from voice to voice, this group seemed to hold together better on the sight reading. . ."

6. The control group was judged to have projected the affective nature of the music better in the post-treatment recording than the experimental group. "Their final performance was less precise (pitch and rhythm), but their greater enthusiasm for the music was obvious. They sang with greater excitement than the experimental group."

7. The control group may have had a slight edge in ensemble listening ability as evidenced by comments on the pre-treatment samples; "They were not as secure in rhythm as was (the experimental group), nor did they sing as many notes, but what they did sing made more sense than that sung by(the experimental group)."

CONCLUSIONS

The Analytical Study of Selected Contemporary American Choral Compositions and the Implications for Teaching Methods of Reading Music has wrought to the investigators' satisfaction the following conclusions;

1. More accuracy and precision of performance is possible when singers are given analytical problems to resolve and are deliberately taught to build general concepts and skills required by contemporary compositional practices. The experimental group was readily perceived to be superior in pitch and rhythm, as well as in confidence of performance after eight treatment periods.

2. Concepts and skills developed by the experimental group tended to be transferable to similar musical problems in other pieces. There was observably more growth in the ability to handle dissonance and rhythmic complexity independently because of the treatment. The control group gave little evidence of being better equipped to cope with contemporary musical problems than before.

3. There is, however, an apparent hazard in the analytical-discovery approach to learning music in rehearsal, perhaps related to the physiological fact that there are approximately forty neural receptors going from eye to brain for every one from the ear to the brain. If continued attention is being called to visual notation symbols there seems to be an overbalancing competition for the brain's attention; the auditory stimuli may thus be sublimated in the subject's response to the more powerful visual appeals until such time as he is sufficiently experienced with both visual and auditory stimuli to integrate them into one musical meaning--a very advanced skill indeed in contemporary music.

4. It is hypothesized, in connection with 3. above, that if both the rote and the studied approaches to the rehearsal experience were carried on until the music were memorized, the subsequent elimination of the competing visual symbols would allow the affective, aesthetic response of the singer to once more emerge in performance. In such a desired situation he would have the accuracy and security which devolved from a studied, analytical approach and which would make faster learning possible through increase of general musical skill and understanding. He would also then have, through memorization, the personal, affective projection of an internalized feeling which was not evident while the experimental group was intellectually and visually involved with the notation.

5. Warm-up material derived from the music being studied is valuable, whether presented purely by rote, e.g.,

   "Sopranos, sing this pitch (B); altos, sing this (A#); tenors, sing this (E); basses, sing this (D#)",

   or by musical meaning, e.g., notation to sounds projected on screen with attention called to the pattern of two intervals of a fifth juxtaposed (E-B; D#-A#), the D# then moving to C# in the tenor with the resultant implication of an incomplete V^7 chord under a "pedal" B, now resolving to a B major chord. The latter approach, however, requires deliberate time-consuming "lesson planning" by the teacher-conductor which few directors presently do. It is significantly more effective in building pupil understanding and musical growth which contemporary idioms relentlessly demand, however.

6. Choral directors will need new skills in highlighting features for student attention, posing problems, experimenting with alternate musical effects, as part of the musical adventure of rehearsing. Yet they must not break the momentum of the rehearsal by stopping the music-making involvement to intellectually "study music theory".

7. Students will need consistent exposure to this kind of rehearsal in educational institutions to condition them to a new type of performance rehearsal, to have their intellectual curiosity quickened as a companion dimension to the

purely physical or emotional satisfaction traditionally experienced. Pre- and post-assessment tools should prove useful here by directing student attention to musical growth potentials available, as well as for the satisfaction of seeing measurable progress in their own growth.

8. A better prepared conductor results from the experience of doing a musical analysis of the composition to be rehearsed, not looking for academic fact, but analyzing in terms of "developing a love affair" with the music as a piece of craftsmanship, and in terms of potential problem spots the students will need specific experiences with as specific musical effects. This might be likened to the experience of a trip down the Grand Canyon with a guide who knows only the way of the trail and how to handle donkeys, compared with the same trip under a guide whose consuming passion has been to know in detail all that is available regarding the geology, the history, the exploration, the panorama, the fauna and the flora of that work of nature.

9. A surprising number of established choral conductors begged off answering the questionnaire because of a lack of familiarity with the literature, indicating that they, too, need this close association with the media to awaken their own appreciation, or to gain confidence that there are techniques which would make it feasible to attempt the music with their own choral groups.

10. Continuing attention needs to be given to the barriers which restrict the implementation of contemporary American choral music by providing aids to the conductor in structuring his rehearsal of individual numbers in such a way that the singers grow in competency to handle musical material idiomatic to this century. This implies agency and foundation support not merely toward the production and dissemination of today's music, but toward the reception and re-creation of the music at the amateur level.

11. Copyright owners will need to be more liberal and aggressive in permitting reproduction of their music in toto and in fragment for study purposes if they wish to see its wider use. This refers particularly to publisher's permission to make overhead transparencies, worksheet copies, "mutilated" scores (i.e., reproductions with deliberate errors to help students experience and evaluate the effect of the composer's choice over other alternate ways of handling musical problems), etc., in the school rehearsal.

RECOMMENDATIONS

Because of the apparent validation of the rehearsal techniques devised and used in this study, they are clarified in more detail here with tentative recommendation. It is recognized that these represent only a beginning, and that the experimenters themselves would do many things differently because of the present experiences. There is, further, a very real need for others in the field to apply themselves to devising and testing more varied analytical activities in which choral students could be involved based upon the skill and concept demands of the music literature under study. Thus qualified, we offer the following.

In the beginning stages of learning, problematic rhythmic features could be flashed by overhead projector transparencies showing words and rhythmic notation only. The chorus responds, observing tonal inflection, phrasing, diction, dynamics, tempos, and other expressive elements. As the singers begin to perceive these patterns correctly, additional elements related to melody and harmony could be introduced in musical context by means of overlay transparencies on an overhead projector. The actual music pages are shown on the base transparency with melodic, then with harmonic, overlays added. Unique melodic intervals are pointed out on the overlays by means of circles notes, arrows, enharmonic notation, and solfeggio symbols. Chords with dissonant structures are blocked out; added tones are circled and quartal harmonies are identified from the root up. The singers hear these relationships played or sung correctly and then sing them melodically and harmonically. The dissonant sonority is sung without and then with the added tone to compare the difference. Quartal harmonies are sung melodically from the root and then harmonically. Singers should often refer to their own musical score to relate the projected image used in pointing out the rhythmic, melodic, and harmonic features. Blend, diction, quality, expression, and phrasing should be continually correlated with these three features. It is recommended that isolated harmonic and scale intervals unique to each composition be dittoed and used for preliminary warmups.

Some additional activities are suggested in melodic and harmonic context which may induce further insight and awareness of the tonalities found in contemporary music. Have the choir members:

1. Sing scale patterns used in melodies and the key centers in which they are found.

2. Think the beginning note of the song, of each new phrase, and of each section.

3. From the beginning tone find the final tone of the phrase and sing scale or disjunct progressions as the music may require leading towards that tone.

4. Hum root tones to chords where these will help to emphasize the key centers oftimes being obscured by the upper harmonies.

5. Raise hands when perceiving a new tone center.

6. Consider the effect of added accidentals to a melodic line and compare the resultant tonality feeling to the original version.

7. Cancel accidentals and sing the resultant phrase diatonically. Then sing as written comparing the effect the alternation made on the tonality.

8. Show, by raising and lowering hand levels as they follow their own parts listening to piano or a recording, whether tones of a given part approach a key center by means of disjunct progressions or of conjunct movement.

9. As they listen to a score on piano or a recording, raise shoulders if tonality is ambiguous and produces tension; lower if traditional tonal feelings are being created.

As students show signs of progress in these skills, it is recommended that larger aspect--such as texture and form--be presented through well-chosen activities. Texture as a structural element is important because it involves understanding of the relationships of separate parts to one another. Elements of rhythm, melody and harmony are interdependent features in a context of musical organization involving texture. Texture is usually considered in two broad categories: contrapuntal and homophonic. Recognition of texture by the singer can help him to relate his own part to all other musical patterns of which he is an integral part.

If the singer is led to discover contrapuntal texture in the music, he may find his part to be an independent melodic line weaving around other melodic lines of equal importance. If he discovers a homophonic texture, he may relate his part to vertical sonorities in chordal patterns supporting a melodic line, or find his part to be the melodic line above supporting chord patterns in other voices. His part may possibly combine with others in contrapuntal-homophonic patterns in which horizontal movement of chord blocks results in general chordal sonorities, the sonorities themselves providing the movement.

Upon first hearing the composition, one student may respond more to rhythmic stimuli, another to melodic contour, and another to distinguishing tonalities or changes in texture or design. If the student is guided by a variety of activities, he can be left to discover the relationship of one section to another within the same composition--the form. By recognizing like and unlike phrases, motives, chord progressions, accompaniment figures, and rhythmic devices, the student begins to understand musically where he has been and where he is going. If the student and teacher are to evaluate whether the form is being understood, methodology should include the use of psychomotor responses to demonstrate the degree of perception. (Even such simple devices as having a part stand or raise hands as they have a main theme in polyphony, or the entire choir stand for the "A" theme's recurrence in a rondo, can make an abstract concept more real.)

As each different area is considered, the student will be guided to discover more details related to a particular element and then to relate it to the whole. One is reminded of Robert Schumann's injunction: "At the sight of a new score the amateur begins to sing--and the artist begins to think."[1]

One of the most difficult and important methods used in promoting musical development is that of valid and reliable evaluation of musical progress. Without effective tools of evaluation, it is impossible to measure objectively a person's musical growth. Performance in singing serves as an important tool for evaluating musical learning in the classroom and not merely as an end for public entertainment. Music education is expressing mounting concern for this confusion of means and ends.

Texter, in an article in the Music Educator's Journal, states that traditional methods of teaching music merely for performance ends leads to a corrupting pressure on the students and teacher. This pressure brings about stereotyped rehearsal methods in which directors are often reduced to calling mistakes to the attention of the singers, drilling the missed notes, progressions, or rhythms, and considering the educational task accomplished when drill-conditioned students respond like puppets with very little cognition or musical growth occurring. According to the discovery method, on the other hand, creative teaching encourages students to build their own concepts of phrasing, of style characteristics, of form, of melodic progression, of organization, and of the intentions of the composer, thus helping them to recreate the music and discover it for themselves with guidance from the director.[2]

---

[1] Robert Schumann, On Music and Musicians (New York: Pantheon Books, Inc., 1946), pp. 31-34.

The director then becomes less a drill master and more an "engineer of learning experiences" who manipulates the musical environment so that cognitive, conceptual learning may occur. He engineers the development of concepts, attitudes and skills, and directs them to the eventual quality performance.

Lines of distinction between methods of teaching music reading from a conceptual approach and traditional rehearsal practices are summarized as follows:

1. To provide experiences wherein student attention is focused upon the separate elements of melody, rhythm, and harmony, comprehending the intelligent musical structure of the whole, as opposed to correcting parts, drilling, imposing interpretations, and other rote-type activities without specific provision for reference to the elements of musical organization.

2. To provide experiences for students to make independent discoveries concerning the elements of musical structure and the constant adventure of musical developing in a given composition. The present writer is unable to see provision for such educative experiences in rehearsal methods commonly employed.

Activities suggested in this study, e.g., the use of transparencies for highlighting rhythmic, melodic and harmonic features in their musical context, emphasize the singer's discovery of structural elements through comparative-analytical procedures, thus providing for a simultaneous development of musical understanding and reading skills.

The recommended programs and objectives of this study raise questions which need to be answered before the ideal of an educative performance rehearsal can be achieved.

1. In realization of the heavy time demands for a conductor to prepare this type of thoroughly planned lesson with related teaching materials for each composition, is it possible to provide adequate time in the teaching load for such lesson planning? Eventually it is hoped that publishers will market educational sets of scores which provide a core of the best contemporary literature , in which the scores are pre-analyzed and sold with overhead transparencies, student worksheets, lesson plans, sequential procedures, etc., included ready-made with the music purchased.

---

[2] Merry Texter, "More than Performance," Music Educator's Journal, Vol. 55 (1969), pp. 39-40.

2. Can incentives be provided to encourage educator-conductors to devise and test various learning activities and share those which show high validity?

3. Since the task of intelligent listening is immensely more difficult with contemporary idioms, can some of these choral rehearsal activities be shared with the audiences in order to give them the benefit of insights gained, thus extending their musical concepts, as part of the concert performance? If, after all, the director and his musicians have labored hours to understand a composition, is it intelligent to go on in a blind assumption that the dilettante listener can grasp it aurally in one hearing?

4. Could music educators, music theorists, musicologists and performers work together, especially within an institution, to correlate music analysis and pedagogical techniques in the preparation of materials and valid methods for learning contemporary music in the rehearsal of performance groups?

5. What effect has the Contemporary Music Project and its sponsorship of resident composers had upon singers in the development of musical skills understandings related to contemporary choral music? With the acceleration of improvement at the transmitter level, has balanced attention been given at the receiver level?

6. Does the choral music of other composers, rated in the questionnaire as being highly representative of twentieth century compositional technique and not analyzed in this study, contain other distinct features apart from those presented in this study? Should these features be used as a basis for a similar study?

7. What can be done to develop progressive graded choral anthologies of contemporary music containing suggested aids and materials for teaching musical concepts and skills required by contemporary music in a developmental sequence?

8. Suitable recordings of much of the choral music of the twentieth century are unavailable. Could outstanding college and university choral groups be commissioned to record this literature and make these recordings available to choral directors through regional libraries or other resource centers?

9. To what extent would the use of electronic devices such as the tachistoscope, the strobo-tuner, the Johnson Intonation Trainer, etc., accelerate student learning, both in the actual choral rehearsal and in programmed self-study activities?

If the present research can be of some influence in encouraging those who direct choruses within the framework of educational institutions to rise from the rote-drill rehearsal and experiment with these and other devices of their own manufacture, measuring their effect upon the demonstrable learning of those who study under them, the efforts of the present investigators will have been vindicated. Contemporary choral music, in its very complexity and strangeness, demands that choruses sing as the Apostle Paul has remarked, not only "... with the Spirit" but "I will sing with the Understanding also." The alternative is to ignore all but the most traditional of contemporary music, which prevalent condition initiated this study.

REFERENCES

1. Baker, Charles E. "A Comparison of Two Methods of Teaching the Reading of Harmony." Unpublished Dissertation. Indiana University, 1964.

2. Bargar, Robert R. "A Study of Music Reading: Groundwork for Research in the Development of Training Programs." Unpublished Dissertation. Ohio State University, 1964.

3. Barnes, James W. "An Experimental Study of Interval Drill as It Affects Sight Singing Skill." Unpublished Dissertation. Indiana University, 1960.

4. Bull, Storm. Index to Biographies of Contemporary Composers. New York: The Scarecrow Press, Inc., 1964. 405 p.

5. Christ, William B. "The Reading of Rhythm Notation Approached Experimentally According to Techniques and Principles of Word Reading." Unpublished Dissertation. Indiana University, 1954.

6. Dailey, William A. "Techniques of Composition Used in Contemporary Works for Chorus and Orchestra on Religious Texts--As Important Representative Works of the Period from 1952 through 1962 the Following Works Will Be Considered: Canticum Sacrum--Stravinsky, Prayers of Kierkegaard--Barber, Magnificat--Hovhaness." Unpublished Dissertation. Catholic University of America, 1965.

7. DeFries, Stanley L. "An Analysis of Preference Patterns in Choral Programs in the United States of America." Unpublished Dissertation. Indiana University, 1966.

8. Hales, B. W. "A Study of Music Reading Programs in High School Choruses in the Rocky Mountain States." Unpublished Dissertation. University of Oregon, 1961.

9. Hammer, Harry, "An Experimental Study of the Use of the Tachistoscope in the Teaching of Melodic Sight Singing." Unpublished Dissertation. University of Colorado, 1961.

10. Harris, Wesley. "An Analytical Inventory of Selected Contemporary SATB Compositions for High School Choirs." Unpublished Dissertation. University of Oregon, 1966.

11. Helbing, Roy. "An Experimental Study of the Relative Effectiveness of 'Whole' and 'Part' Methods of Teaching Sight Singing." Unpublished Dissertation. Indiana University, 1965.

12. Hornyak, R. Robert. "The Trouble with Modern Music," *American Education,* III(1967), back cover.

13. Jeffries, Thomas B. "The Effects of Order of Presentation and Knowledge of Results on the Aural Recognition of Melodic Intervals." Unpublished Dissertation. University of California, 1965.

14. Jones, Archie. Techniques in Choral Conducting. Boston: Carl Fischer, Inc., 1948. 136 p.

15. Leonard, Charles, and Robert W. House. *Foundations and Principles of Music Education.* New York: McGraw-Hill Book Co., 1959. 375 p.

16. Logemann, Mrs. George W., editor. *Catalog of Published Concert Music by American Composers.* Washington, D. C.: U. S. Government Printing Office, 1964. 175 p. Supplement, 1965. 74 p.

BIBLIOGRAPHY

Books

Contemporary Music for Schools. Contemporary Music Project for Creativity in Music Education. Washington, D. C.: MENC, 1966, 88p.

Dallin, Leon. Techniques of Twentieth Century Composition. Dubuque, Iowa: Wm. C. Brown, 1964. 242 p.

Edlund, Lars. Modus Tonus: Studies in Reading Atonal Music. New York: Alexander Boude, Inc., 1967. 111 p.

Ehret, Walter. The Choral Conductor's Handbook. New York: Marks Music Corp., 1959. 55 p.

Ernst, Karl D., and Charles L. Gary, editors. Music in General Education. Washington, D. C.: MENC, 1965. 223 p.

Forte, Allen. Contemporary Tone Structure. New York: Columbia University, 1955. 194 p.

Garretson, Robert L. Conducting Choral Music. Boston: Allyn and Bacon, 1961. 246 p.

Hansen, Peter S. An Introduction to Twentieth Century Music. Boston: Allyn and Bacon, 1967. 420 p.

Hanson, Howard. Harmonic Materials of Modern Music. New York: Appleton-Century Crofts, Inc., 1960. 381 p.

Henry, Nelson B., editor. Basic Concepts in Music Education. (NSSE Yearbook, LVII.) Chicago: University of Chicago Press, 1958. 362 p.

Howard, John T. Our Contemporary Composers: American Music in the Twentieth Century. New York: Thomas Y. Crowell Co., 1941.

Kirk, T. W. Key to Sight Reading. Westburg, Long Island: Pro Art Publications, Inc., 1957. 54 p.

Kowall, Bonnie C. Perspectives in Music Education. Source Book III. Washington, D. C.: MENC, 1966. 575 p.

Machlis, Joseph. Introduction to Contemporary Music. New York: W. W. Norton, 1961. 714 p.

Mager, Robert F. Preparing Instructional Objectives. Palo Alto: Fearon Publishers, 1962. 60 p.

Marquis, G. W. Twentieth Century Musical Idioms. Englewood Cliffs, New Jersey: Prentice-Hall, 1964. 269 p.

Perle, George. Serial Composition and Atonality. Berkeley: University of California Press, 1962. 154 p.

Persichetti, Vincent. Twentieth Century Harmony: Creative Aspects and Practice. New York: W. W. Norton, 1961. 287 p.

Spohn, Charles L., and B. William Poland. Sounds of Music: Ascending Intervals. Englewood Cliffs: Prentice-Hall, 1967. 93 p.

--------. Sounds of Music: Descending Intervals. Englewood Cliffs: Prentice-Hall, 1967. 93 p.

--------. Sounds of Music: Harmonic Intervals. Englewood Cliffs: Prentice-Hall, 1967, 93 p.

Wilson, Harry Robert. Artistic Choral Singing. New York: G. Schirmer, Inc., 1959. 374 p.

Music

Barber, Samuel. "Anthony O'Daly," Op. 16, No. 2, From Reincarnations, for four-part chorus of mixed voices a cappella. New York: G. Schirmer, 1942. 7 p.

Copland, Aaron. In the Beginning, for mixed chorus a cappella with mezzo-soprano solo. New York: Boosey and Hawkes, 1947. 56 p.

Dello Joio, Norman. A Jubilant Song, for full chorus of mixed voices with piano. New York: G. Schirmer, 1946. 27 p.

Foss, Lukas. Psalms, for chorus of mixed voices with two pianos. New York: Carl Fischer, 1957. 47 p.

Ives, Charles. Three Harvest Home Chorales, for mixed voices with piano accompaniment. New York: Mercury Music, 1949. 16 p.

Persichetti, Vincent. "Gloria," from Mass, for mixed chorus a cappella. Philadelphia: Elkan-Vogel, 1962. 10 p.

Pinkham, Daniel. Stabat Mater, for soprano solo, chorus of mixed voices with organ (piano) accompaniment. New York: C. F. Peters, 1964. 30 p.

Schuman, William. "The Last Invocation," from Carols of Death, for mixed chorus a cappella. Bryn Mawr, Pa.: Merion Music, Inc., 1959. 6 p.

Recordings

Barger, Samuel. Reincarnations. Gregg Smith conducting the Gregg Smith Singers. Everest 3129.

Copland, Aaron. In the Beginning. Aaron Copland conducting the New England Conservatory Chorus. CBS Masterworks 32110018.

-------. In the Beginning. Gregg Smith conducting the Gregg Smith Singers. Everest 3129.

-------. In the Beginning. Lewis E. Whikehart conducting the Whikehart Chorale. Lyrichord LL124.

Foss, Lukas. Psalms. Roger Wagner conducting the Roger Wagner Chorale. Composers' Recordings, Inc. CRI 123.

Ives, Charles. Three Harvest Home Chorales. Robert Shaw conducting the Robert Shaw Chorale. RCA Victor LSC-2676.

Schuman, William. Carols of Death. Gregg Smith conducting the Gregg Smith Singers. Everest 3129.

Dissertations

Bastone, Philip Norman. "Multiple Order Functions in Twelve-Tone Music." Unpublished Dissertation. Princeton University, 1965.

Bean, Kenneth. "An Experimental Approach to the Reading of Music." Unpublished Dissertation. Ohio State University, 1938.

Gaburo, Kenneth L. "Studies in Pitch Symmetry in Twentieth Century Music (with Original Compositions by Author)." Unpublished Dissertation. University of Illinois, 1962.

Gerow, Maurice. "A Study of the Relation between the Criteria Used for Choral Concert Building at the College Level, and an Analysis of the Elements of Music Structure Found in Choral Music." Unpublished Dissertation. Michigan State University, 1961.

James, Woodrow C. "The Use of Harmonic Tritone in Selected Passages from the Music of Representative Contemporary Composers." Unpublished Dissertation. Michigan State University, 1966.

Larson, Robert W. "Stylistic Characteristics in A Cappella Compositions in the United States, 1940-1953: As indicated by the works of Jean Berger, David Diamond, Darius Milhaud, and Miklos Rossa." Unpublished Dissertation. Northwestern University, 1953.

Lewin, Harold F. "Aspects of the Twelve-Tone System: Its Formation and Structural Implications." Unpublished Dissertation. Indiana University, 1965.

Marquis, James Henry. "A Study of Interval Problems in Sightsinging Performance with Consideration of the Effects of Context." Unpublished Dissertation. State University of Iowa, 1963.

Nicholson, Robert A. "The Harmonic Preparation of the High School Choral Conductor." Unpublished Dissertation. Indiana University, 1965.

Ray, Harry, Burton. "An Experimental Approach to the Reading of Pitch Notation." Unpublished Dissertation. Indiana University. 1964.

Ritchie, Tom V. 'A Study of the Effects of Diatonic Harmony upon the Aural Perception of Melodic Fragments." Unpublished Dissertation. Indiana University, 1960.

Shelney, Orville Bennett. "An Investigation of Dissonance Perception of Undergraduate Music Majors." Unpublished Dissertation. Indiana University, 1956.

Wiley, Charles A. "An Experimental Study of Tachistoscopic Techniques in Teaching Rhythmic Sight Reading in Music." Unpublished Dissertation. University of Colorado, 1962.

Appendix A
Questionnaire Materials

Accompanying Letter

Dear Colleague:

The enclosed survey is being made as part of a study in teaching contemporary choral literature. The realization of three specific purposes is anticipated through this study.

1. To identify and isolate specific musical demands of representative contemporary choral music upon those who teach and perform it (to be accomplished through musical analysis).

2. To formulate methods of helping singers meet these musical demands.

3. To determine the validity and reliability of the formulated methods.

This survey is to ascertain the nature, difficulty, and frequency of problems encountered in the performance of choral music written by contemporary American composers. Those composers and compositions most frequently encountered in this survey will be considered for the major portion of a subsequent analytical study. While thoughtful consideration is needed, it is not necessary to become involved in analytical research. Respond to as many as possible (up to fifteen composers and compositions) through recall of past experiences with the music.

In order to meet the deadline for this phase of the study, your response is needed by December 20, 1968. Return only the questionnaire in the enclosed stamped envelope. Please check on page one of the questionnaire if you wish to receive the results of this survey. The names of those making professional contribution through this questionnaire will be acknowledged in the final report of the research project. Your participation will be appreciated.

USE SURVEY OF CONTEMPORARY AMERICAN COMPOSERS AND CHORAL COMPOSITIONS

INSTRUCTION SHEET

(Note: This questionnaire refers only to SATB a cappella or keyboard-accompanied compositions.)

Step 1 From the following list, rank consecutively the fifteen recognized, contemporary American composers whose published SATB choral music of the past twenty years you consider most representative of distinct 20th century compositional techniques: dissonance; expanded tonalities; synthetic scales; quartal harmonies; polyrhythms and polytonalities; tone clusters; tone-row features; irregular rhythms, harmonies, melodies; etc., as opposed to common practice of the eighteenth and nineteenth centuries.

Step 2 From the following list, and according to your own experience with the music, select the one composition by each of the fifteen composers you identified which best represents that composer's use of 20th century techniques. An additional space is provided for your choice of a composition which may have been omitted.

Step 3 To the right of each composition you have selected, rate the degree of difficulty which each musical feature presents to singers learning the music.

Use this key:
0--not significant; 1--somewhat difficult; 2--very difficult; 3--the most difficult.

Example:

(Step 1)
✓(8) DOE, JOHN

	melody				harmony				rhythm				phrasing				texture				tonality				tone-row			
	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.
( ) Wind and Rain																												
( ) Ode to Freedom																												
(X) Melancholy			☒					☒	☒				☒					☒					☒		☒			
( ) Song of Justice																												
( )																												

(Step 2)

(Step 3)

Step 4 If you would like to suggest other composers whose music reflects the above-mentioned standards (and who from age twenty-six on have been residents of the U. S.), on the last page please rank by number their place in the list of fifteen composers. List a composition by each which is familiar to you, and rate the difficulty of each musical feature according to procedures in step three.

QUESTIONNAIRE

Name________________________ Position________________________

Institution____________________ Address________________________

Please check here if you wish to have the results of this survey.______

Please check here if you do not wish to have your name used for acknowledgement in this study___

CONTEMPORARY CHORAL COMPOSERS AND REPRESENTATIVE CHORAL COMPOSITIONS

	melody				harmony				rhythm				phrasing				texture				tonality				tone-row			
	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3
	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.
( ) ADLER, SAMUEL																												
( ) How Precious Is Thy Lovingkindness																												
( ) I Will Give Thanks																												
( ) Autumn Rain																												
( ) Strings in the Earth																												
( ) Some One																												
( )																												
( ) ALEXANDER, JOSEF																												
( ) A New Psalm																												
( ) Psalm 66																												
( )																												
( ) ANTHEIL, GEORGE																												
( ) Cabeza de Vaca																												
( )																												
( ) BACON, ERNST																												
( ) Devilish Mary																												
( ) The Shouting Pilgrim																												
( ) John Hardy																												
( ) The Long Farewell																												
( )																												
( ) BARBER, SAMUEL																												
( ) Heaven-Haven (A Nun Takes the Veil)																												
( ) Let Down the Bars, O Death																												
( ) Reincarnations																												
( )																												
( ) BECK, JOHN NESS																												
( ) Canticle of Praise																												
( )																												

	melody				harmony				rhythm				phrasing				texture				tonality				tone-row			
	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3
	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.
( ) CARTER, ELLIOT																												
( ) Musicians Wrestle Everywhere																												
( ) To Music																												
( ) Winter Night on the Mountain																												
( )																												
( ) COPLAND, AARON																												
( ) In the Beginning																												
( ) Las Agachadas																												
( ) Heart Not as Heavy As Mine																												
( )																												
( ) COWELL, HENRY																												
( ) The Road Leads Into Tomorrow																												
( ) Ballad of the Two Mothers																												
( )																												
( ) CRESTON, PAUL																												
( ) Alleluia (from "Isaiah's Prophecy")																												
( ) Glory to God in the Highest (from "Isaiah's Prophecy")																												
( ) Dedication																												
( ) Lilium Regis																												
( ) Praise the Lord																												
( ) Thou Hast Made Me Endless (from "Tagore")																												
( ) Where the Mind Is Without Fear (from "Tagore")																												
( )																												
( ) DELLO JOIO, NORMAN																												
( ) A Jubilant Song																												
( ) A Song of the Open Road																												
( ) Madrigal																												
( ) The Mystic Trumpeter																												
( ) O Sing Unto the Lord																												
( ) Vigil Strange																												
( ) A Fable																												
( )																												

	melody				harmony				rhythm				phrasing				texture				tonality				tone-row			
	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3
	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.
( ) DIAMOND, DAVID																												
( ) Chorale																												
( ) This is the Garden																												
( ) Four Madrigals																												
( )																												
( ) FINNEY, ROSS																												
( ) On a Round Ball (from "Spherical Madrigals")																												
( ) See How the Arched Earth (from "Spherical Madrigals")																												
( ) Pilgrims Psalms																												
( )																												
( ) FOSS, LUKAS																												
( ) Psalms																												
( ) Behold, I Build an House																												
( ) Tell This Blood																												
( ) Song of Anguish																												
( )																												
( ) GIANNINI, VITTORIA																												
( ) Good Friday																												
( ) GOODMAN, JOSEPH																												
( ) Four Motets																												
( ) How Beautiful the Queen of the Night																												
( )																												
( ) HANSON, HOWARD																												
( ) How Excellent Thy Name																												
( ) Be as a Lion																												
( ) Maypole Dance																												
( )																												
( ) HEIDEN, BERNARD																												
( ) Divine Poems of John Donne																												
( )																												

	melody				harmony				rhythm				phrasing				texture				tonality				tone-row			
	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3
	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.
( ) HOVHANESS, ALAN																												
( ) The Beatitudes (from "Triptych")																												
( ) Give Ear to My Prayer																												
( ) The God of Glory Thundereth																												
( ) Hear My Prayer, O Lord																												
( ) Make Haste																												
( ) Praise Ye the Lord																												
( ) Sing Aloud																												
( ) Transfiguration																												
( ) IVES, CHARLES																												
( ) Three Harvest Home Chorales																												
( ) Psalm 67																												
( ) Let There Be Light																												
( ) Psalm 24																												
( )																												
( ) KAY, ULYSSES																												
( ) Flowers in the Valley																												
( ) Sing unto the Lord																												
( )																												
( ) KIRK, THERON																												
( ) Five Shakespeare Songs																												
( )																												
( ) MECHAM, KIRKE																												
( ) In the Land of Morgenstern																												
( )																												
( ) MENNIN, PETER																												
( ) The Christmas Story																												
( ) The Cycle																												
( ) Crossing of the River																												
( ) The Gold-Threaded Robe																												
( )																												

	melody				harmony				rhythm				phrasing				texture				tonality				tone-row			
	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.	0 not signif.	1 some diff.	2 very diff.	3 most diff.
( ) MOORE, DOUGLAS																												
( ) Dedication																												
( ) Perhaps to Dream																												
( )																												
( ) NELSON, RON																												
( ) Glory to God (from "The Christmas Story")																												
( )																												
( ) PERSICHETTI, VINCENT																												
( ) Agnus Dei (from "Mass")																												
( ) Gloria (from "Mass")																												
( )																												
( ) PINKHAM, DANIEL																												
( ) Behold, How Good and How Pleasant																												
( ) How Precious Is Thy Loving Kindness																												
( ) Thou Hast Loved Righteousness																												
( ) Why Art Thou Cast Down?																												
( ) Stabat Mater																												
( )																												
( ) PISTON, WALTER																												
( ) Psalm and Prayer of David																												
( )																												
( ) RIEGGER, WALLINGFORD																												
( ) Who Can Revoke?																												
( ) From Some Far Shore																												
( )																												
( ) ROREM, NED																												
( ) Hey Nonny No																												
( ) Tears																												
( ) The Corinthians																												
( )																												

	melody				harmony				rhythm				phrasing				texture				tonality				tone-row			
	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3
	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.
( ) SCHUMAN, WILLIAM																												
( ) Pioneers																												
( ) A Free Song																												
( ) Epitaph for Joseph Conrad (from "Four Canonic Choruses")																												
( ) Come Not (from "Four Canonic Choruses")																												
( ) The Last Invocation (from "Carols of Death")																												
( ) The Unknown Region (from "Carols of Death")																												
( ) The Lord Has a Child																												
( ) Requiescat																												
( ) Prelude for Voices																												
( ) Te Deum																												
( )																												
( ) SESSIONS, ROGER																												
( ) Turn, O Libertad																												
( )																												
( ) SHIFRIN, SEYMOUR																												
( ) Give Ear, O Ye Heavens																												
( )																												
( ) SOWERBY, LEO																												
( ) Ad te Levavi Animam Meam																												
( ) Te deum laudamus																												
( )																												
( ) STEVENS, HALSEY																												
( ) Ballad of William Sycamore																												
( ) Like as the Culver on the Bared Bough																												
( ) When I Am Dead, My Dearest																												
( )																												
( ) WEISGALL, HUGO																												
( ) God Is Due Praise																												
( ) When Israel out of Egypt Came																												
( ) Who Is Like Unto Thee?																												
( )																												

This is my personal recommendation and rating of composers and works omitted from the above list:

	melody				harmony				rhythm				phrasing				texture				tonality				tone-row			
	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3
	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.	not signif.	some diff.	very diff.	most diff.
( )																												
( )																												
( )																												
( )																												
( )																												
( )																												
( )																												
( )																												
( )																												
( )																												

APPENDIX B

RESULTS OF SURVEY
AND ACKNOWLEDGMENT OF RESPONDENTS

Appendix B

Results of Survey and Acknowledgement of Respondents

Letter of Resume

Dear

Your response to our questionnaire sent in December was appreciated, especially in view of the deadline which had to be met and the busy season of the year. These responses have been compiled and analyzed on the enclosed form. The percentage of returns at first glance seems quite small (15%). However, letters from conductors who did not complete the questionnaires expressed insufficient personal experience with the music under investigation--which seems to validate a hypothesis of the study itself.

Some respondents expressed interest in the following additional men: William Bergsma, Leonard Bernstein, Jacob Avsholomov, Emma Lou Dienier, Paul Fetler, Roy Harris, John LaMontaine, George Rockberg, and Randall Thompson. Some of these composers are not yet widely known by most of the respondents to the questionnaires. Others, e. g., Randall Thompson, are more closely associated with the last 19th century styles than with contemporary American.

Consideration should also be given to the highly diversified backgrounds of the choral conductors who completed the questionnaire, indicating familiarity and concurrence with all but four of the thirty-seven listed composers. Many responses proposed different selections by the same composers as being more representative of that composer and involving greater degrees of difficulty in the same selection (referring to the organizational features of melody, rhythm, harmony, etc.) --indicated by plus and minus signs by each selection listed opposite the fifteen ranked composers. A higher skill level among the choral students of the responding conductors could also have influenced the evaluation of the various degrees of difficulty involved in the compositions.

Prime consideration has been given to the questionnaire responses in selecting the first ten composers and the representative selections for analysis. This analysis will deal with identifying, isolating, and organizing the musical features in the music, and relating these features to the skills needed by singers to learn and perform the music successfully. Methods will then be formulated for the teaching of each composition analyzed.

RESULTS OF SURVEY

Composers are listed in rank order representing the fifteen U. S. composers considered as being most representative of distinct twentieth century idioms.

The percentages represent the percent of respondents voting for the most representative SATB a cappella or keyboard accompanied compositions for a particular composer.

KEY: Musical features and range of difficulties expressed by a majority of the respondents.
A - melody B - harmony C - rhythm D - phrasing E - texture F - tonality G - tone row
0 - not significant 1 - somewhat difficult 2 - very difficult 3 - most difficult

COMPOSER	PERCENTAGE	COMPOSITION	FEATURES						
			A	B	C	D	E	F	G
1. Charles Ives	48%	Three Harvest Home Chorales	3	3	3	3	2	3	0
	44%	Psalm 67	1	2	1	1	3	3	1
2. Samuel Barber	44%	Reincarnations	1	1+	1	1	1	1	0
3. Norman DelloJoiw	32%	Jubilant Song	1	1	2-	1	1	1	1
4. Vincent Persichetti	40%	Gloria (from "Mass")	1	1	2-	1	1	2	0
5. Daniel Pinkham	24%	Stabat Mater	1	1+	2	1	2-	2-	1
6. Lukas Foss	24%	Psalms	2	2-	2-	2	2-	2-	1-
7. William Schumann	24%	The Last Invocation (from "Carols of Death")	1	2	1	1	1+	2	0
8. Aaron Copland	60%	In the Beginning	1	2	1+	1+	2	2	0+
9. Paul Creston	24%	Alleluia (from "Isaiah's Prophecy")	2	2	2	1	2	2	1
	20%	Thou has made me endless (from "Tagore")	1	1+	1	1	1+	2-	0
10. Alan Hovhaness	16%	Praise Ye the Lord (many other selections received recognition)	1-	1	1	2	1	1	0+
11. Halsey Stevens	24%	Like as the Culver on the Bared Bough	1	1	0+	1+	1	1+	0+
12. Ned Rorem	8%	Hey Nonny No	1	2	1-	1-	1	1-	0
	8%	Tears	1	1+	1+	1-	2	1	0
13. Elliot Carter	20%	Musicians Wrestle Everywhere	2-	2	2	2	2	1+	0
14. Ross Finney	16%	See How the Arched Earth (from "Spherical Madrigals")	1	2	0+	2	1	2	0+
15. Roger Sessions	12%	Turn O Libertad	2	2	2	1+	2	2+	0
	12%	Mass	2	0	1	1	0	2	0

A plus by a number indicates a significant number of responses (but not a majority) chose the next highest number.

A minus by a number indicates a significant number of responses (but not a majority) chose the next lowest number.

Acknowledgment of

Questionnaire Respondents

Respondent	Position	Institution	City and State
Morris J. Beachy	Director, Choral Organiz.	University of Texas	Austin, Texas
George W. Corwin	Director, Choral Activities	Ball State University	Muncie, Indiana
Arthur E. Huff	Asst. Prof. of Music	Fresno State College	Fresno, California
Jeseph Huszti	Director, Choral Organiz.	University of Delaware	Newark, Delaware
Wayne Gard	Chairman, Music Dept. and Director, Choral Activities	Long Beach City College	Long Beach, Calif.
John R. Halliday	Professor of Music	Brigham Young Univ.	Provo, Utah
Wayne S. Hertz	Chairman, Dept. of Music	Central Wash. State College	Ellensburg, Wash.
Ambrose Holford	Director, Choral Activities	University of Tennessee	Knoxville, Tenn.
Maurice A. Jones	Asst. Prof. of Music	University of Cincinnati	Cincinnati, Ohio
George F. Krueger	Chairman, Choral Dept.	Indiana U. Sch. of Music	Bloomington, Indiana
H. M. Langsford	Prof. of Music	Wayne State University	Detroit, Michigan
James R. Lindholm	Director, Contemp. Chori	Butler University	Indianapolis, Indiana
John A. Mac Donald	Chairman, Dept. of Music	University of Akron	Akron, Ohio
Vito E. Mason	Professor of Music	American University	Washington, D. C.
Frank McKinley	Director, Choral Activities	North Texas State U.	Denton, Texas
Robert E. Page	Director, Choral Activities	Temple University	Philadelphia, Pa.
Stan Porter	Director, Choral Organiz.	Cerritos College	Norwalk, California
Stuart W. Raleigh	Director of Chorus	Syracuse University	Syracuse, New York
Max Risinger	Prof. of Music and Director, Choral Organiz.	U. of Oregon, Sch. of Mus.	Eugene, Oregon
Gregg Smith	Director, Choral Activities	Peabody Conservatory and St. U. of New York	Baltimore, Maryland Stony Brook, N. Y.
Lynneer Smith	Choral Director	Weber State College	Ogden, Utah
Howard Swan	Professor of Music	Occidental College	Los Angeles, Calif.
Newell B. Weight	Chairman, Dept. of Music	University of Utah	Salt Lake City, Utah
Scott S. Withrow	Assoc. Prof. of Music	Peabody College	Nashville, Tenn.
Ralph Woodward	Director, Choral Activities and Prof. of Music	Brigham Young U.	Provo, Utah

Four others who wish to remain anonymous.

APPENDIX C

STANDARD TERMINOLOGY FOR IDENTIFICATION OF SPECIFIC ELEMENTS IN CONTEMPORARY MUSIC ANALYSIS

A. Melodic contour and organization.

1. Extended cadence and phrase structure.
2. Contrasting phrase length within a period.
3. Intervallic construction (refer to B).
4. Modes: Dorian, Phrygian, Lydian, Mixolydian, Aeolian, Locrian, polymodality, polytonal-modal, polymodal-poly tonal, modal modulation.
5. Synthetic scale formations: mirrors of intervals, super Locrian, major Locrian, Neapolitan minor, Neapolitan major, Oriental, double harmonic, enigmatic, overtone, Hungarian minor, Hungarian major, Lydian minor, eight-tone Spanish, leading whole-tone, symmetrical, poly-key signature.
6. Pentatonic and hexatonic scales.
   a. Combinations of pentatonic and non-pentatonic.
   b. Whole-tone scales.
   c. Combination of whole-tone and non-whole-tone scales.
7. Chromatic figures.
   a. Chromatic figuration of non-chromatic harmony.
   b. Chromatic harmony with diatonic melody.
   c. Chromatic harmony with chromatic melody.
8. Atonal melodies: Series transposition, inverted series, retrograde series, retrograde inversion.
9. Serial melodies: original, inverted, retrograde, retrograde inversion, row transposition.
10. Contemporary harmonies used as a basis for melodic formation:
    a. Ninth, eleventh, thirteenth, fifteenth, seventeenth chords.
    b. Twelve-note chords.
    c. Clusters.
    d. Quartal harmonies.
    e. Extended fifths.
11. Melodic doubling.
    a. Major sixths or minor thirds.
    b. Major thirds or minor sixths.
    c. Minor sevenths or major seconds.
    d. Perfect fifths or fourths.
    e. Tritones.

B. Intervals.
   1. Two-part writing in four-part music (doubling voices).
   2. Exploitation of certain intervals.
   3. Characteristic spacing.
   4. Use of overtone series in musical structure.
   5. Specific melodic intervals
      a. Perfect fifth and octave.
      b. Major and minor thirds.
      c. Minor seconds and major sevenths.
      d. Perfect fourths.
      e. Tritones (augmented fourths or dimished fifths).
      f. Ninth, tenth, eleventh, twelfth, and thirteenth chords.
   6. Intervals in chords: equidistant, mixed, consonant-dissonant combinations, tritones, dominance of specific intervals.
   7. Enharmonic combinations.

C. Harmonic Structure.
   1. Superimposed thirds.
      a. Chromatically altered seventh chords.
      b. Ninth, eleventh, thirteenth, fifteenth, and seventeenth chords.
      c. Twelve-note chords.
   2. Quartal harmonies.
      a. Three-note chords by fourths.
      b. Four-note chords by fourths.
      c. Multi-note chords by fourths.
   3. Chords of addition.
      a. Augmented sixth chords.
      b. Major and minor seconds.
   4. Chords by seconds: three-note, multi-note, clusters.
   5. Polychords.
      a. Two triadic units
      b. Three or more triadic units.
      c. Mixed on non-triadic units.
   6. Compound and mirror harmony (superimposed of miscellaneous intervals).

D. Harmonic progression.
   1. Modal: Dorian, Phrygian, Lydian, Mixolydian, Aeolian, Locrian.

2. Free relation of quality.
    a. Alternating major and minor.
    b. Polymodal.
    c. False relations.
    d. Interposition of various major or minor triads.
3. Root movement: seconds, thirds and fifths, variety.
4. Dissonance.
5. Retrogression.
6. Parallel harmony: real parallel harmony, tonal parallel harmony, altered parallel.
7. Successive perfect fifths.
8. Cadential modification.
    a. Modified dominant (s).
    b. Modified tonic (s).
    c. Linear cadence (s).
    d. Chromatic cadence (s).
    e. Combination of consonance and dissonance.
    f. Non-cadential endings.

E. Non-harmonic materials
    1. Passing tones.
    2. Neighboring tones or auxiliaries.
    3. Suspensions.
    4. Retardations.
    5. Anticipations.
    6. Free anticipations or escape tones.
    7. Appoggiaturas.
    8. Changing tones.
    9. Pedal points.

F. Key centers.
    1. Tonality: modulation, tonality by non-traditional means.
    2. Polytonality.
    3. Dual modality.
    4. Pandiatonic.
    5. Atonal.
    6. Free serial technique.

G. Rhythm and dynamics.
   1. Irregular harmonic rhythms.
   2. Meter changes.
   3. Poly-rhythms.
   4. Polymeters.
   5. Percussive features in harmony.
   6. Characteristic dynamics and rests.

H. Sonorities--characteristic effects of accompanying instruments upon: harmonic structure, intervallic texture, spacing, dynamic, balance.